AMENDMENT OF SOLICITATION/MODIFICATION OF CONTRACT

1. Contract ID Code	Page	Of
Firm-Fixed-Price	1	23

2. Amendment/Modification No.	3. Effective Date	4. Requisition/Purchase Req No.	5. Project No. (If applicable)
P00009	2007MAY30	SEE SCHEDULE	

6. Issued By Code W56HZV

U.S. ARMY TACOM LCMC
AMSTA-AQ-ATB
DELORES TROTTER (586)753-2734
WARREN, MICHIGAN 48397-5000
HTTP://CONTRACTING.TACOM.ARMY.MIL

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7. Administered By (If other than Item 6) Code SUK12A

DCMA NORTHERN EUROPE
(UNITED KINGDOM)
PCS 826, BOX 55
LOUDWATER UNITED KINGDOM
FPO, AE 09420-0055

SCD C **PAS** NONE **ADP PT** HQ0339

8. Name And Address Of Contractor (No., Street, City, County, State and Zip Code)

FBM BABCOCK MARINE LTD
THE COURTYARD
ST CROSS BUSINESS PARK, MONKS BROOK
NEWPORT, IW, GB
UNITED KINGDOM PO30 5BF

TYPE BUSINESS: Foreign Concern/Entity

Code K3335 **Facility Code**

☐ **9A. Amendment Of Solicitation No.**

9B. Dated (See Item 11)

☒ **10A. Modification Of Contract/Order No.**
W56HZV-04-D-0318

10B. Dated (See Item 13)
2004SEP27

11. THIS ITEM ONLY APPLIES TO AMENDMENTS OF SOLICITATIONS

☐ **The above numbered solicitation is amended as set forth in item 14. The hour and date specified for receipt of Offers**
☐ **is extended,** ☐ **is not extended.**

Offers must acknowledge receipt of this amendment prior to the hour and date specified in the solicitation or as amended by one of the following methods: (a) By completing items 8 and 15, and returning _____ copies of the amendments: (b) By acknowledging receipt of this amendment on each copy of the offer submitted; or (c) By separate letter or telegram which includes a reference to the solicitation and amendment numbers. FAILURE OF YOUR ACKNOWLEDGMENT TO BE RECEIVED AT THE PLACE DESIGNATED FOR THE RECEIPT OF OFFERS PRIOR TO THE HOUR AND DATE SPECIFIED MAY RESULT IN REJECTION OF YOUR OFFER. If by virtue of this amendment you desire to change an offer already submitted, such change may be made by telegram or letter, provided each telegram or letter makes reference to the solicitation and this amendment, and is received prior to the opening hour and date specified.

12. Accounting And Appropriation Data (If required)
NO CHANGE TO OBLIGATION DATA

13. THIS ITEM ONLY APPLIES TO MODIFICATIONS OF CONTRACTS/ORDERS
It Modifies The Contract/Order No. As Described In Item 14.

KIND MOD CODE: G

☐	**A. This Change Order is Issued Pursuant To: The Changes Set Forth In Item 14 Are Made In The Contract/Order No. In Item 10A.**
☐	**B. The Above Numbered Contract/Order Is Modified To Reflect The Administrative Changes (such as changes in paying office, appropriation data, etc.) Set Forth In Item 14, Pursuant To The Authority of FAR 43.103(b).**
☒	**C. This Supplemental Agreement Is Entered Into Pursuant To Authority Of:** MUTUAL AGREEMENT OF BOTH PARTIES
☐	**D. Other (Specify type of modification and authority)**

E. IMPORTANT: Contractor ☐ **is not,** ☒ **is required to sign this document and return _____ copies to the Issuing Office.**

14. Description Of Amendment/Modification (Organized by UCF section headings, including solicitation/contract subject matter where feasible.)

SEE SECOND PAGE FOR DESCRIPTION

Contract Expiration Date: 2008SEP30

Except as provided herein, all terms and conditions of the document referenced in item 9A or 10A, as heretofore changed, remains unchanged and in full force and effect.

15A. Name And Title Of Signer (Type or print)		16A. Name And Title Of Contracting Officer (Type or print)	
		LAWRENCE R. ELLENA LARRY.ELLENA@US.ARMY.MIL (586)574-6952	
15B. Contractor/Offeror	**15C. Date Signed**	**16B. United States Of America**	**16C. Date Signed**
_____ **(Signature of person authorized to sign)**		**By** /SIGNED/ **(Signature of Contracting Officer)**	2007MAY30

SECTION A - SUPPLEMENTAL INFORMATION

1. The purpose of this Modification (P00009) is to combine all previous updates and/or changes to the Scope of Work in Section C, and current Exhibits and Attachments in Section J as follows:

Exhibit A	Contract Data Requirements' List (CDRL)
Exhibit B	Contract Data Requirements' List (CDRL)
Exhibit C	Data Item Description (DID)
Attachment 001	Performance Based Purchase Description (ATPD)
Attachment 002	Configuration Management Documentation
Attachment 003	Milestone Billing Schedule
Attachment 004	Milestone Billing Schedule
Attachment 005	Listing of ASL, Unit Level & Sustainment Tools and Standalone Sustainment Level Tools
Attachment 006	Milestone Billing Schedule
Attachment 007	Listing of MKI & MKII Parts to be Salvaged from GFP Boats
Attachment 008	Government Furnished Property, CDR Boat Serial No. 0360

2. All other terms and conditions remain the same.

*** END OF NARRATIVE A 0008 ***

SECTION C - DESCRIPTION/SPECIFICATIONS/WORK STATEMENT
\fprq2
C.1 General. The Bridge Erection Boat (BEB) is an aluminum-hulled, twin-diesel, twin-jet work boat that supports float bridging operations. It is used to build bridges and build and maneuver rafts. It is transported, launched and retrieved by the M1977 Common Bridge Transporter (CBT) truck and M14 Improved Boat Cradle (IBC). Its dimensions are roughly 27 feet long, 8 feet wide and 26 inches draft. The normal crew is one operator and one bridge crewman. The BEB is operated by and maintained using the personnel and equipment of the Multi-Role Bridge Company (MRBC).

C.1.1 Definitions. For this SOW the following definitions apply:

C.1.1.1 BEB: The new Bridge Erection Boat, NSN 1940-01-526-0770
C.1.1.2 MK I, NSN 1940-01-105-5728/ US CSB MK II, NSN 1940-01-218-9165: The fielded Bridge Erection Boat
C.1.1.3 Contractor: FBM Babcock
C.1.1.4 Government: The US Army (PM Assured Mobility Systems, formerly PM Bridging)

C.1.2 Program Overview. The Contractor is responsible for the overall design, development, component selection, integration, fabrication, Contractor testing, Government test support, logistics product development and fielding support, configuration management, production planning and eventual full production of the BEB.

C.1.3 Program Management. The Contractor shall be responsible for overall program management, which includes as a minimum, the allocation and control of Contractor provided resources as well as the synchronization of Government provided resources to achieve program objectives and requirements.

C.1.3.1 Work Breakdown Structure (WBS). The Contractor shall prepare and maintain a WBS and a WBS Dictionary using MIL-HDBK-881 as a guide for format and content. The Government reserves the right to review and approve the WBS Structure. The Contractor shall define all subcontracted effort within the WBS. Contract change proposals require the same level of WBS identification, definitions, and SOW relationships as the basic contract. No WBS changes shall be made at or above the third level of the WBS without Government approval.

C.1.3.2 Master Integrated Program Schedule (MIPS). The Contractor shall create and maintain a MIPS. The Government will approve the baseline and all revisions. The MIPS will assist in the measurement of risk management, performance, and program schedule. The Contractor is responsible for explaining all program slippages and providing get-well plans within 30 days of discovery of a program slippage (Reference CDRL A001).

C.1.3.3 Meetings and Reviews. The Government and Contractor shall conduct meetings and reviews either formally or informally as needed to ensure the success of the BEB. The Contractor shall host a Start of Work meeting within 30 days of contract award. The Start of Work meeting should be held either at or near his domestic production facility. Meetings may be either in-person or via teleconference. The Contractor shall prepare minutes and maintain the status of action items generated in the course of each meeting or review. Minutes will be provided to all stakeholders no later than five working days from the meeting or review (Reference CDRL A002). Electronic delivery is acceptable. The Government or Contractor shall provide notice of formal meetings or reviews at least ten days prior to the requested meeting/review.

C.1.3.3.1 Preliminary Design Review. The Contractor shall conduct a preliminary design review in conjunction with the start of work meeting. During this review the Contractor shall present his planned solutions to achieving the requirements of ATPD 2317 Performance Based Purchase Description, Bridge Erection Boat (Attachment 1). The preliminary design review is considered complete upon Government written approval of the minutes and all proposed design alternatives.

C.1.3.3.2 Critical Design Review. The Contractor shall conduct a Critical Design Review at his facility prior 60 days after the approval of the PDR. The Contractor shall present his system design with supporting analysis. The critical design is considered complete upon written Government approval of the minutes and finalized requirements (specified, derived, and implied).

C.1.3.4 In-Process Reviews (IPR). The Contractor shall conduct quarterly IPRs that address, at a minimum technical performance progress, technical data development, ILS development, cost and schedule status. The location of these IPRs will be the Contractors facility unless otherwise agreed to by the parties.

C.1.3.5 Working Integrated Process Teams (IPT). The Contractor shall form working IPTs as necessary to support the BEB effort. The working IPTs will be composed of Contractor and Government personnel. The working IPTs will guide the direction and progress of the program. The working IPTs will be responsible for risk mitigation efforts.

C.1.3.6 Risk Monitoring. The Government will manage risk by tracking completion status of important program elements. The Contractor shall develop and submit a list of elements to be tracked. The list shall be based upon the requirements of the SOW, WBS, MIPS and CDRLs. The list shall identify a Contractor POC and a recommended reporting period for each element. The Government will approve the list and establish a reporting period. The Contractor shall submit a recurring report summarizing the completion status of agreed elements. The Government may add or delete elements from the list as the contract progresses (Reference CRDL A00N).

C.1.4 Data. The Contractor shall provide access to Contract Data Requirements List (CDRL) and non-CDRL data containing management,

financial, engineering, and logistics information electronically. The Contractor may provide the access via a secure web site that he manages. Access to data shall be password protected and available only for contract purposes. This on-line access to Contractor data shall be available to the Government via personal computers. All data to be delivered under this contract shall be available electronically and in Contractor format unless otherwise specified in the contract.

C.2 Engineering. The Contractor shall perform the engineering and design effort necessary to document, fabricate, test, deliver and support boats conforming to ATPD 2317 Performance Based Purchase Description, Bridge Erection Boat (Attachment 1).

C.2.1 Configuration Management and Control. The Contractor shall establish and utilize configuration management tools and procedures in accordance with Attachment 2, Configuration Management and Technical Data Package (Reference CDRLs A003, A004, A005, A006, A007, A008, and A009).

C.2.2 Part Numbers. All components of the BEB shall have part numbers. These numbers will be used for component identification during manufacture and provisioning. Commercial or Original Equipment Manufacturer (OEM) part numbers shall be used. Part numbers shall be applied to items or to their packaging in accordance with the suppliers practices (for commercially available items) and in accordance with MIL-STD-130L (for Contractor manufactured items).

C.2.2.1 Unique Identifiers (UID). The Contractor shall develop and assign UID codes for components and assemblies in accordance with MIL-STD-130L. UID labeling shall be applied to items in accordance with MIL-STD-130L. At a minimum, UID codes shall be assigned and applied to all provisioned items with a value of at least $5000 and to these specific items:

C.2.2.1.1 Boat, complete
C.2.2.1.2 Engine assembly, complete, as containerized
C.2.2.1.3 Jet Assembly, complete, as containerized
The decision to assign a UID to any other item shall be made when the item is provisioned.

C.2.3 Specifications. Specification ATPD 2317 Performance Based Purchase Description, Bridge Erection Boat establishes the performance standards for the boat. This document will be developed and maintained by the Government.

C.2.3.1 The Contractor shall develop second tier specifications for major components (engine, gears, and propulsion jet) to ensure their performance and maintainability characteristics comply with ATPD 2317. Such specifications shall be developed and maintained by the Contractor. Specifications shall be included on or referenced by drawings as appropriate.

C.2.3.2 The Contractor shall develop specifications to define or ensure the performance, quality and maintainability of purchased components and manufactured items. These specifications may be product specifications developed for this program. Nationally recognized standards and specifications (ISO, DIN, SAE, ASTM, etc.) shall be utilized as appropriate. These specifications shall be included on or references by drawings as appropriate.

C.2.4 Transportability Report. The Contractor shall submit a transportability report that describes how the boat is transported and describes the boats compliance with the transportability requirements of ATPD 2317. The report shall include the data required by Data Item Description DI-PACK-80880B, limited to identification of differences between the MK II, NSN 1940-01-218-9165 and the BEB and the effects of these differences on transportability. The report is due 30 days after the Critical Design Review is completed in accordance with CDRL A007.

C.2.5 Preservation and Packaging.

C.2.5.1 Boat Preservation and Packaging, Short Term. The Contractor shall develop materials, processes and procedures to protect the boat during shipment, handling, and temporary storage prior to shipment for fielding. The BEB shall be fielded in unit sets of 14. Adequate protection and security shall be given to equipment and components susceptible to loss or damage from pilferage, vandalism, vibration, corrosion, or other environmental deterioration and any other conditions incidental to the shipment of the boat. Commercial practices and standards are acceptable.

C.2.5.1.1 Shipboard Delivery Packaging. Boats designated for overseas delivery will be shipped as deck cargo. The short term preservation and packaging procedures shall contain a section identifying special procedures, if any, that apply to this mode of delivery (Reference CDRL A00B).

C.2.5.2 Boat Preservation and Packaging, Long Term. The Contractor shall develop materials, processes and procedures to protect the boat during exterior storage in excess of 90 days. Adequate protection and security shall be given to equipment and components susceptible to loss or damage from pilferage, vandalism, vibration, corrosion, or other environmental deterioration and any other conditions incidental to the shipment of the boat. Commercial practices and standards are acceptable. The Contractor shall provide drawings of containers designed specifically for the BEB components (Reference CDRL A00B).

C.2.5.3 Component Preservation and Packaging. The Contractor shall develop preservation methods and packaging for components and assemblies that are provisioned as replacement items. This packaging shall be developed in accordance with commercial practice. Existing packaging shall be used to the maximum extent practical.

C.2.5.4 Reusable Container Development. The Contractor shall develop reusable shipping and storage containers for the dressed power pack, dressed propulsion jet, and transmission. These containers shall protect their contents against physical and environmental damage and pilferage of components. Commercial containers are acceptable or MIL-PRF-1126E may be used as a design guide. The contents of the dressed power pack, dressed propulsion jet, and transmission shall be developed during the provisioning process (Reference CDRL A00B).

C.2.5.5 Packaging Schedule. Packaging for the boats and the reusable containers shall be developed prior to the delivery of the first production boat. Packaging for components shall be developed and submitted in conjunction with the development of provisioning data, per Section 4 of this SOW. Packaging shall be applied to boats in accordance with Section C.7.1 of this SOW (Reference CDRL A00B).

C.2.6 Emergent Work: Prior to performing the alterations required by paragraph C.2 of this SOW, the Contractor shall perform preliminary work on the Government furnished hulls (GFH), USCSB MK 1, NSN 1940-01-105-5728 and USCSB MK 2, NSN 1940-01-218-9165. This work shall identify discrepancies in the GFH and what it would take to restore the GFH to a condition suitable for conversion to MK II-S, M2S, NSN 1940-01-526-0770 configuration.

C.2.6.1 Engineering Services: The Contractor shall perform and document hull surveys to identify problems, catalog them, identify corrective actions, estimate repair costs, and identify schedule impacts. Surveys shall be performed to assist the Government in selecting hull to become GFH and to identify discrepancies in hulls already selected. These surveys shall be documented using an Emergent Work Survey Report (Ref. CDRL A00P).

C.2.6.2 Fabrication Activities: The Contractor shall repair or replace components as directed by the Government. All work shall be performed in accordance with the paragraph C.6 (inclusive) of this SOW. Work shall be limited to that approved by the Government. The scope of the work shall be the minimum that restores the physical condition, operational features and interfaces of the GFH to a condition that allows incorporation of the MK II-S, M2S, NSN 1940-01-526-0770 modifications and restores the projected life of the boat to 20 years.

C.2.6.3 Place of Work: Surveys shall take place at Government facilities (i.e. prior to the GFH being selected for induction into the program) and/or at the Contractors plant (i.e. after the GFH has been selected for induction into the program). Fabrication activities shall be performed at the Contractors plant. This effort includes two survey trips per year, one to Red River Army Depot and one to Anniston Army Depot to select GFH.

C.2.6.4 Schedule: Every boat shall be surveyed after the existing machinery and components have been removed and the hull is clean. This survey shall be incorporated in the Contractors manufacturing process. Boats shall be inspected, prior to delivery to the Contractors plant, when directed by the Government.

C.3 Production Planning. The Contractor shall be required to use a US-based shipyard for the production of the BEB. The Contractor shall be responsible for the management and oversight of the shipyard ensuring that all requirements of the contract are met. The shipyard will be an integral member of all teams described in paragraph C.1.3.

C.3.1 Production Plan. The Contractor shall develop a plan detailing his approach for the tear down, re-assembly, inspection, test, acceptance and delivery of boats during the production phase of the program. This plan shall become part of the contract and shall be used in managing that effort. The plan shall address all aspects of the production effort to include; facilities, physical resources, materials, personnel, tools and tooling, tests, test equipment, work flow, storage and control of vendor supplied items, and temporary storage and shipment of the completed boats. Risk areas shall be identified. Mitigation measures shall be identified for each risk. This plan shall be delivered, in Contractor format for approval, to PM-Bridging no later than 90 days after contract award (Reference CDRL A00C). Department of Defense Directive 4245.7-M, Chapter 5 shall be used as a guide in preparing the Production Plan.

C.3.1.2 Disposition of MK I, NSN 1940-01-105-5728/MK II, NSN 1940-01-218-9165 parts. The Contractor shall remove and prepare for shipment unused MK I, NSN 1940-01-105-5728 and MK II, NSN 1940-01-218-9165 parts designated by the Government for use by the Government. As part of the PDR the Contractor will identify for the Government those MK I, NSN 1940-01-105-5728 and MK II, NSN 1940-01-218-9165 parts they do not plan to reuse during the BEB effort. Within 30 days of notification the Government will identify those MK I, NSN 1940-01-105-5728 and MK II, NSN 1940-01-218-9165 parts it will take for use on other efforts. This list will be included in the Contractors production plan. All other parts will be disposed of by the Contractor.

C.3.2 Production Review (PR). The Contractor shall hold a PR 100 days after contract award. The PR shall be held at the Contractors facility. The PR shall address management and technical disciplines, design maturity, item configuration, facilities, equipment, production line status, and overall production readiness. The PR results will be used to determine if the design is ready for production, production problems have been resolved, and the Contractor has accomplished adequate planning for the production phase. The PR is considered complete upon Government approval of the minutes and finalized requirements (specified, derived, and implied).

C.4 Integrated Logistics Support.

C.4.1 Integrated Logistic Support (ILS) Program. The Contractor shall develop and implement an ILS Program as part of the overall BEB Program.

C.4.1.1 ILS Plan: The Prime Contractor shall develop a plan describing how he intends to fulfill the requirements herein. The plan shall be as extensive as necessary to demonstrate that the Prime Contractor understands the requirements, allocates appropriate resources, and identifies risk areas. The plan will include internal procedures/controls that address ILS influence on design, data requirements, and schedule with milestones for Logistics Management Information (LMI, provisioning, technical manuals), and updates to the program. The plan is subject to Government approval and addresses supportability analysis, maintenance planning, training programs, technical manuals, supply support planning and support equipment. A single point of contact for ILS (Prime, Production Center, SubContractors), shall be identified to the Government. The plan shall be submitted to the Government 75 days after contract award in accordance with CDRL A009 and requires written approval of PCO.

C.4.1.2 Contractor ILS Objectives:

C.4.1.2.1 Develop the ILS concept with the Government.
C.4.1.2.2 Identify design changes to improve safety, improve ease of maintenance, and increase reliability.
C.4.1.2.3 Accurately identify and document all logistics support resources to operate and maintain the system.
C.4.1.2.4 Develop a cost effective maintenance plan and Logistics Support Package (technical manuals, repair parts, tools, test equipment, provisioning) incorporating engineering changes, test incident corrective actions, and validating and updating vendor information.
C.4.1.2.5 Create and deliver Logistics Products to support test and logistics events. (logistics demonstration, validations and verifications, fielding, and training)

C.4.1.3 Maintenance Planning. The Contractor shall review the complete configuration of the BEB. They shall identify all potential tasks required to place the BEB in operation, operate the BEB, perform scheduled services on the BEB, and maintain or repair the BEB and all its components. The maintenance concept will be oriented toward Army two-level maintenance.

C.4.1.3.1 Supportability Analysis. The Prime Contractor shall conduct a supportability analysis to determine the maintainability characteristics of the system. The Contractors shall identify the Logistics Control Number (LCN), maintenance functions, level of maintenance, manpower, Source, Maintainability & Recoverability (SMR) codes, task times, annual maintenance manhours, spare parts, troubleshooting and diagnostics, support equipment, any scheduled maintenance requirements and steps to perform tasks for each repairable item. The analysis shall be conducted in end item hardware top-down, breakdown sequence. The Contractor shall present this list to the Government for review and approval prior to creating logistics products (technical manuals, provisioning and training). The list may be submitted to the Government incrementally for review and in accordance with CDRL A00D.

C.4.1.3.2 Functional Requirements Identification. The Contractor shall:

C.4.1.3.2.1 Develop and Maintain LCN structure to repair part level.
C.4.1.3.2.2 Identify peculiar, unique and common tools, parts, equipment and additional authorized list (AAL) equipment.
C.4.1.3.2.3 Develop and Update the Operator/Maintenance Task List.
C.4.1.3.2.4 Furnish Oil Analysis data as required by DI-MISC-80390 (Reference CDRL A009).

C.4.2 Repair Analysis. In creating the BEB Maintenance Task List, the Contractor shall perform a Level of Repair Analysis (LORA) to determine if it is economical to repair potentially reparable components. If the LORA indicates an item should be repaired, the LORA will recommend which entity within the Army Maintenance structure shall perform the repair. In absence of a suitable Army structure qualified for repair, the recommendation may include Contractor logistics repair. The Contractor shall submit his LORA not later than 90 days after contract award in accordance with CDRL A00D. The Contractor may use the Armys COMPASS LITE to perform this level of repair analysis or may offer an alternative LORA model to the Government for approval. (COMPASS LITE is available free of charge to Government Contractors on the LOGSA website, http://www.logsa.army.mil/alc/lite.)

C.4.3 Provisioning.
References: MIL-PRF-45906, dated 11 Nov 96
Quality Assurance Provisioning Guidance Book (QAPG)
Army Materiel Command (AMC) Pamphlet 700-25, Guide to Provisioning.

C.4.3.1 Provisioning Objectives. The Contractor shall develop, maintain and deliver to the Government, provisioning data (Provisioning Master Record or PMR) IAW in MIL STD-1388-2B format (available upon request from the Contracting Officer). This requires development of the Contractor database and continuous update of the Government PMR following the final provisioning conference. PMR shall include data for all major assemblies, assemblies, sub-assemblies, components, piece parts, their relational next higher assembly (NHA), mounting/attaching hardware and repair kits. Components of End Item (COEI), Basic Issue Items (BII), Additional Authorized Items List (AAL) and Special Tools/Test Equipment (STTE) and Test Measurement and Diagnostic Equipment (TMDE) required to support the BEB shall be included in the PMR. Common hand tools found in the Army Supply System shall not be included.

C.4.3.2 Provisioning Contract Control Number (PCCN). The PCCN for the BEB is C01911, Model Record AAAA. All provisioned items shall be identified with an Usable On Code (UOC) of DVW.

C.4.3.3 Provisioning Schedule and Conferences. Realizing that the PMR is a dynamic 'work-in-progress', the Contractor shall, at the Start of Work meeting, deliver a schedule outlining his/her estimate of the total number of anticipated provisioned items and a

sequential calendar time-line in which to review all necessary PMR data entries and required technical data associated with these items for the BEB. A minimum of 500 and maximum of 1500 lines of provisioning are the norm for any 40 hour period with a typical PMR record consisting of eight lines of provisioning.

C.4.3.4 Provisioning Data Quality Assurance. The Contractor shall develop, maintain and continuously update/revise the PMR to reflect the most current and accurate configuration of the BEB, associated Engineering Data for Provisioning (EDFP), pricing, engineering changes and technical data throughout the life of the contract. The PMR shall be structured in a logical "top-down, disassembly" numeric PLISN sequence with ten (10) spaces between each four (4) character Provisioning List Item Sequence Number (PLISN.). The Government will approve/reject the PMR format and structure at the first scheduled provisioning conference. Once approved, no record shall be deleted from the PMR without Government approval. Changes, revisions shall be documented via creation of a new PLISN record. The Government's final acceptance of the PMR, associated EDFP and technical data shall be based in part on the Contractor's compliance with the guidance in this SOW, the QAPG, and successful loading of the PMR data into the Government's recognized master data base with an error/reject percentage of less than 5 percent. Any PMR data submission exceeding 5 percent errors shall be rejected and returned to the Contractor for correction within 30 working days after official notification.

C.4.3.5 Logistics Management Information (LMI) Data Products. The Contractor shall develop and continuously update the following LMI data products. Current submittals are due at each scheduled provisioning conference and final submittals are delivered in accordance with CDRL A00A. Data products deemed inaccurate, incomplete or unacceptable will be rejected by the Government at the provisioning conference. The Contractor shall have 30 working days to make corrections and electronically re-submit data for review/acceptance. Formal notice of acceptance/rejection will be made through the contracting officer. The following data constitutes LMI data products:

Provisioning Parts List (PPL) The PPL is structured in PMR format (see MIL-PRF-49506 for guidance), depicting the actual manufacturer's part number and Commercial Activity Government Entity (CAGE) code, with 10 spaces between four character PLISNs, depicting all items provisioned to date. Two paper copies of the PPL shall be delivered at each scheduled provisioning conference for Government use.

Pre-Procurement Screening - Each item provisioned shall be screened for the existence of a valid National Stock Number (NSN), using available screening tools (e.g. Haystack, Federal Logistics Information Service, etc.), along with the NATO Master Cross Reference List (NMCRL). One paper copy of the screening results shall be delivered at each scheduled provisioning conference for Government use. Where an item screen results in a valid NSN, the following data shall be validated:

The Manufacturer's part reference number
The Manufacturer's CAGE code
The Item Nomenclature
The Reference Number Category Code (RNCC)
The Reference Number Variation Code (RNVC) - acceptable
Combinations of RNCC/RNVC are 2-2, 3-2
The Item's Shelf Life Code (SL)
The Actual Unit of Measure (UM)
The Unit of Measure Price
The Item's Essentiality Code (EC)
The Item's Recoverability Code

C.4.3.5.1 Engineering Data for Provisioning (EDFP). Where no valid NSN is available, appropriate EDFP shall be developed supporting the provisioned item. The EDFP shall be in the English Language.

C.4.3.5.2 Adequate EDFP may include an engineering drawing which completely identifies the item as to size, dimensions, special characteristics and material composition. The associated PLISN shall be annotated above the drawing's 'title block' and the actual manufacturer's CAGE code shall be depicted adjacent the drawing/part number. Any EDFP which is deemed "proprietary" in nature shall be clearly labeled as PROPRIETARY DATA-FOR PROVISIONING PURPOSES ONLY.

C.4.3.5.3 Two paper copies of EDFP shall be delivered at each scheduled provisioning conference for Government Use. Upon successful completion of the provisioning conference, one composite CD-R, containing all the EDFP submitted, in PLISN sequence, shall be delivered to the Government.

C.4.3.5.4 No EDFP shall be required where a provisioned item is identified by recognized, verifiable Government or industry standard/specification which results in an NSN. Nor will EDFP be required for items which have been identified and noted in the PMR as 'referenced' to a 'first-appearance' PLISN.

C.4.3.6 The Government may, at its discretion, submit Provisioning Technical Documentation (PTD) reports which identify data changes (part/reference number, Source, Maintenance and Recoverability (SMR) codes, etc. The Contractor shall incorporate these data into the PMR.

C.4.3.7 As part of the PMR the following data elements shall be developed for Data Record H:

Reference Number

Provisioning System Identification Code (the PCC)
CAGE code
Reference Number Category Code (RNCC)
Reference Number Variation Code (RNVC)
Item Nomenclature
Reference Number overflow (where required)
National Stock Number (NSN)
Unit of Issue (UI)
Unit of Issue Price (initially, estimated prices may be used - iterative use of $1.01 or $0.99 is discouraged)
Unit of Issue Conversion Factor
Shelf Life Code (where appropriate)
Additional Reference Number (where necessary)
Additional Reference Number CAGE code (where appropriate)
Additional Reference Number RNCC/RNVC (where appropriate)
Unit of Measure (UM)
Unit of Measure Price

C.4.3.7.1 As part of the PMR the following data elements shall be developed for Data Record H1:

Reference Number
Significant Character Code
LSA Control Number
Provisioning System Identification Code
Usable On Code (UOC) = DVW
Indenture Code
PLISN
Quantity per Assembly
Quantity per End Item
Next Higher Assembly (NHA) PLISN
Same As PLISN (SAP) (referenced items)
Source, Maintenance and Recoverability (SMR) code (manufacturer's recommendation)
Demilitarization Code (DEMIL)
Maintenance Replacement Rate (MRR) I
Maintenance Replacement Rate (MRR) II
Maintenance Replacement Rate Modifier
Maintenance Task Distribution (MTD)
Repair Cycle Time (RCT)
Essentiality Code (EC)
Functional Group Code (FGC), where applicable
Technical Manual (TM) Figure Number
TM Item Number
TM Code
Replacement Task Distribution (RTD)
Change Authority (for provisioned items requiring change)
Interchangeability Code (used with Change Authority)
Serial Number Affectivity (used with Change Authority)
Change Authority Number
Any additional data elements required by the Contractor's automated system

C.4.4 Not Used

C.4.5 Not Used

C.4.6 Technical Publications.

C.4.6.1 Contractor shall develop equipment Technical Manuals (TM) listed below in accordance with the technical content requirements of MIL-STD-40051B. The Government will provide the TM Code at the Start Of Work meeting.

C.4.6.2 Contractor-developed TMs will be subdivided into volumes (if applicable), chapters, and work packages in accordance with MIL-STD 40051B. Individual work packages will not exceed 30 pages. The Contractor will assign each work package a numeric work package number in accordance with MIL-STD 40051B. MIL-HDBK 1222B provides examples of typical work package style and format. Best commercial practice will govern work package type size, alignment, style, and spacing (Reference CDRL A00B).

C.4.6.3 All Contractor-developed graphics will be delivered in one of the following graphic file formats in accordance with MIL-STD 40051B, in addition to one paper copy:

C.4.6.3.1 Computer Graphic Metafile (CGM)
C.4.6.3.2 Adobe Acrobat (PDF)
C.4.6.3.3 Continuous Acquisition and Life-Cycle Support (CALS) Raster
C.4.6.3.4 Initial Graphics Exchange Specification (IGES)
C.4.6.3.5 Tagged Image File Format (TIFF)
C.4.6.3.6 Joint Photographic Experts Group (JPEG) (preferred)

C.4.6.4 Contractor shall ensure the Final Draft Equipment Publication (FDEP) delivered under this contract is consistent with the Government approved equipment configuration as a result of final tests. The Contractor must validate technical manual data that changes as a result of this testing prior to FDEP delivery.

C.4.6.5 TM numbers for the BEB publications are:

C.4.6.5.1 Operator Manual TM 5-1940-322-10
C.4.6.5.2 Field and National Maintenance Manual TM 5-1940-322-25
C.4.6.5.3 Repair Parts and Special Tools List TM 5-1940-322-25P
The Contractor shall deliver copies of the publication electronically, in Microsoft Word and editable PDF, in addition to one hard copy per CDRL A00B. Draft TM delivery shall adhere to the delivery dates specified during start of work meeting.
C.4.6.5.4 Contractor shall produce and deliver an editable (i.e. Adobe Acrobat) ETM file or word processing file (i.e. MS Word for Windows or equivalent) for each publication in paragraph C.4.6.5.

C.4.6.6 Battle Damage Assessment Repair (BDAR). As directed by the Contracting Officer, the Contractor shall prepare inventive and uncharacteristic repairs for battle time sustainment. BDAR instructions shall be developed to support the BEB and will be included as a dedicated chapter of the operator and unit maintenance manuals. Such repair instructions are to provide a basis for field expedient fixes during emergency or combat operations. Purpose is to rapidly return disabled boats to safety or to the operational commander by expediently fixing, bypassing or jury-rigging components to restore the minimal essential systems required for the support of the mission or to enable the boat to self-recover. Such repairs are temporary and may not restore full performance. Guidance for development of BDAR may be found in Army Field Manual, FM 20-22, "Vehicle Recovery Operations" or in TM 9-2320-356-BD. Copies of both of these documents will be provided to assist in applying BDAR principles to the BEB mechanical recovery procedures (Reference CDRL A00C).

C.4.6.7 Not Used

C.4.6.8 Not Used

C.4.6.9 The Contractor shall validate the accuracy of all publication deliverables. The Government has the right to review validation records and witness validation processes at any time during the Contractor performance period. The Government reserves the right to verify all publication deliverables. Government reviews and verification may be done through statistical sampling, a mix of desktop review and actual performance. If the Contractor has not adequately validated data, the Government may return products for rework. TM validation/verification will be accomplished as much as possible coincident with the combined Logistics Demonstration/Validation Verification (paragraph 4.7).

C.4.6.10 Two-Level Maintenance. The Army's two-level maintenance system consists of Field Maintenance and Sustainment Maintenance. These requirements will be further discussed at the Start of Work meeting.

C.4.6.10.1 Field Maintenance will consist of on-system repairs. It is mainly replacement of defective parts and preventive maintenance. Field maintenance is done by operators or at the unit level or near the unit. It returns repaired equipment to the soldier. It covers crew, unit and selected direct support maintenance tasks. It consists of tasks that do not require further disassembly of the component to accomplish repairs. Parts/components requiring disassembly or further repairs are replaced on the end item with failed parts to be evacuated to Sustainment Maintenance.

C.4.6.10.2 Sustainment Maintenance will consist of off-system repairs. It is mainly repair of defective equipment parts. Sustainment maintenance is designed to repair and return items to the supply system. Sustainment maintenance includes maintenance tasks required to return components, subassemblies and/or end item systems to serviceable condition in accordance with National Maintenance Standards.

C.4.6.11 Special Tools and Test Equipment (STTE). The Contractor shall identify all special tools and test equipment required to service or repair the BEB. Special Tools are defined as tools not found in the U.S. Army's "General Mechanics" tool kit (NSN: 5180-01-454-3787), "Organizational Maintenance" Common #1 tool kit (NSN: 4910-00-754-0654), "Common #2" tool kit (NSN: 4910-00-754-0650), tool kit "Supplement #1" (NSN: 4910-00-754-0653) and Forward Repair System (NSN: 4940-01-463-7940). The Government will approve all recommendations for implementation.

C.4.6.12 Publication History File. The Contractor shall maintain a file of all manual changes made during this contract to include engineering change proposals and post-fielding reports. It shall be available to Government representatives upon request.

C.4.6.13 Reproduction Rights. The Government shall have unlimited rights to reproduce technical manuals and all illustrations developed under this contract.
C.4.7 Combined Logistics Demonstration (LD)/Validation Verification (VV). The LD is a hands-on verification of the Logistics Support Package carried out by performing selected tasks using actual hardware. The VV concentrates on the accuracy of tasks and accompanying illustrations. The LD/VV focus will be on improved maintainability, the identification of system design improvements, a reduction of special tools, improved safety procedures in maintaining the boat, and timed reduction of maintenance task performance.

C.4.7.1 Contractor Responsibilities. The Contractor shall act as a consultant to Government operators and mechanics in performing operator and maintenance tasks during the LD/VV. The LD/VV shall be conducted at the Contractors production site. Contractor facilities will include adequate shop area, overhead lift capabilities, requisite common tools, special tools, and test and diagnostic equipment required to perform all identified BEB operator and maintenance tasks. The LD/VV will include physical performance of all PMCS and all scheduled maintenance tasks. The LD/VV will also include physical performance of not less than 35% non-scheduled maintenance tasks and a 100% desktop review of all remaining non-scheduled maintenance tasks.

C.4.7.1.1 Logistics Products and Support Equipment. The Contractor shall supply all BEB technical manuals including a complete Repair Parts and Special Tools List (RPSTL), all mandatory replacement items, all consumable supplies, parts, safety items, and all approved STTE/TMDE identified for successful performance of the BEB LD/VV.

C.4.7.2 LD/VV Procedures. The Government shall provide the Contractor with a draft Government TM verification plan no later than 90 days prior to the start of the LD/VV effort; this plan will include the specific maintenance tasks identified either hands-on or for desk-top review. Government reserves the right to require additional hands-on task performance of selected operator and maintenance procedures to determine TM quality. The Contractor shall incorporate all comments resulting from LD/VV prior to submission of the final TMs.

C.4.8 System Support.

C.4.8.1 System Support Package (SSP). The Contractor shall support the LD/VV and test events with a logistics support package that includes parts, manuals, engineering data and training documents as required herein.

C.4.8.1.1 LD/VV System Support Package (SSP). The Operator and Maintainer LD/VV Task List will be provided to the Contractor 90 days after contract award. The Contractor shall provide a draft SSP List (SSPL) to the Government within 30 days of LD/VV Task List receipt (Reference CDRL A00D). The Contractor shall review the LD/VV task list and determine what items will be needed (consumed, used, referenced) to successfully complete the tasks. At a minimum, it should include, but not be limited to: repair parts, unique and special tools, common tools, draft technical manuals (with RPSTL), all associated BEB drawings which may be required. The Government will review and approve the draft SSPL with comments 15 days after receipt from the Contractor. The approved SSPL shall be ordered and delivered to the LD/VV site prior to the event.

C.4.8.1.2 Test SSP. When directed by a delivery order, and if testing is required away from the Contractors facility, the Contractor shall determine which items will be needed to successfully support testing. The test SSP will include repair parts, unique and special tools, common tools, draft technical manuals (with RPSTL), all associated BEB drawings which may be required, and Training Course One Program of Instruction. The test SSP is Contractor-generated and Government-approved. The test SSP shall be delivered to the test site prior to the start of Government testing. The SSP will be inspected by the Government for completeness prior to the start of test. The SSP shall be replenished as required throughout the duration of the test. If any testing requires re-test, the SSP will be updated and made available at the time of re-test.

C.4.8.2 Not Used

C.4.8.3 Contractor Field Support Initial Fielding. The Contractor shall provide one or more technical specialists who individually know all aspects of the boat: hydraulic, electrical, hull to act as field service representatives. They will provide fielding support as the Government issues boats. Their duties will include assistance with boat repair and minor unit training. These representatives shall also assist the materiel fielding team as needed. The Contractor shall also work to support total package fielding requirements in emergency cases. For six months after the initial fielding (the first unit equipped) the Contractor shall provide one field service representative who will ensure that the BEBs are properly serviced and trouble free. The field service representative shall maintain a log of required service and problems encountered along with the resolution of the problem. The Contractor shall provide a copy of the log to the Government on a weekly basis.

C.4.8.4 Contractor Technical Support. The Contractor or subContractor shall provide technical representatives on site at the test and logistics events as necessary to support the Government objectives. Support can include technical assistance, user training, technical data collection and reporting, operating, troubleshooting, component and system fault isolation and repair. It may also include postfielding modification programs. Estimated support should not exceed 60 days per event.

C.4.8.5 Contractor Fielding Support. The Contractor shall provide one or more technical specialists who individually know all aspects of the boat: hydraulic, electrical, hull to act as field service representatives. They will be on call and designated for fielding support as the PM issues boats. Their duties will include assistance with boat repair, minor unit training. These representatives will also assist the materiel fielding team as needed. The Contractor shall also work to support total package fielding requirements in emergency cases. Estimated Contractor support should not exceed 60 days per fielding.

C.4.8.6 Field Support, Transportation. The Contractor will also package, store and ship Unit fielding sets of 14 boats to each location site 30 days prior to fielding.

C.4.8.6.1 Total Package Fielding Support. The Contractor shall order, package, store, and ship Unit fielding sets for Total Package Fielding to include but not limited to Authorized Stockage List (ASL), special tools for field and sustainment level and Basic Issue Items (BII) at Governments request prior to or concurrent with boat shipment to Unit fielding sites.

C.4.8.7 Facility Boat Support. The Contractor shall ensure the first production unit boat is in good working condition throughout the program. The Contractor shall provide parts, facilities, technical and maintenance support for the facility boat. The facility boat shall have all configuration changes incorporated as a result of test changes, Contractor initiated changes, or Government direct changes. This includes restoration following logistics events, conferences (static operations), and test. The Contractor shall provide transportation for the boat to and from such events.

C.4.8.8 Contractor Logistics Support (CLS). Contractor Logistics Support is essentially using a commercial source to provide support for materiel employed by Army field units in the form of field service, maintenance, supply and distribution, training, and rebuild/overhaul of specified items. When directed by the Contracting Officer, through issuance of a delivery order, the Contractor agrees to participate in Contractor logistics support. The CLS effort will be negotiated in a separate contract with the Contractor and may require participation in direct vendor delivery, training, and repair/maintenance. The maintenance portion of the CLS may require field service representative diagnosis, repair, or upgrade. The supply portion of the CLS contract may require Contractor evacuation, and return of items/ components that fail. The CLS Contract may be for multi-year support of the system.

C.4.8.9 Direct Vendor Delivery (DVD) Contract. When directed by the Contracting Officer, through issuance of a delivery order, the Contractor agrees to participate in a DVD contract for spare parts with TACOM, Defense Logistics Agency (DLA), or other support service agencies to maintain the BEB. The DVD effort will be negotiated in a separate contract with the Contractor and the DVD Contract will require the delivery of parts directly from the Contractor to the unit. The requisition and electronic data integration will be transparent to the field units in that requisitions will be dropped through routine unit channels. The requisition will pass electronically through the supply center to the Contractor to fill the requisition direct ship to the unit. The DVD Contract may be for multi-year support of the system.

C.4.9 MANPRINT

C.4.9.1 The Contractor shall address MANPRINT considerations using Government resources/experts and incorporate them throughout the design and fabrication processes of the BEB to maximize soldier-machine interface. The Contractors MANPRINT program shall be designed to ensure MANPRINT requirements by domain are considered throughout the design process. The Contractor shall also coordinate MANPRINT decisions with the applicable logistics and systems engineering activities. The Contractor shall ensure lessons learned from the previous BEB and human factors design guidelines and criteria have been incorporated into the system design, if available. Human factors engineering design guidelines, along with the definition of strength requirements of 5th percentile female soldiers are found in MIL-STD-1472F. Also included are the strength requirements for a Military Occupational Specialty (MOS) 21C soldier (reference AR 6-11). All tasks shall be designed to be performed by soldiers with skill and strength levels as defined by the MOS 21C. The Contractor shall present MANPRINT efforts and status as part of the IPT process or as requested by the Government.

C.4.9.2 Logistics Human Factors Engineering (HFE). The Contractor shall subject all design changes/modifications that will have an impact on the soldier machine interface to Human Factors Engineering (HFE) evaluations/assessments. The soldier machine interface design shall facilitate the BEB crews rapid and easy deployment of the BEB under all required operational conditions within the prescribed deployment times. The 5th percentile female through the 95th percentile male soldier wearing (1) arctic and (2) Mission Orientated Protective Posture (MOPP Ensemble) clothing shall be capable of operating the BEB.

C.4.9.3 Manpower. The BEB shall not require any additional manpower, beyond that required for the MK II, NSN 1940-01-218-9165 BEB, for maintenance, recovery or deployment under all operational conditions.

C.4.9.4 Personnel. The bridge crew shall easily maintain, deploy and recover the BEB. Cognitive and physical requirements for the crew shall be less or similar to present BEB. The BEB shall require no new Military Occupational Specialty (MOS) or Additional Skill Identifier (ASI).

C.4.9.5 Training. The Contractor shall optimize BEB component commonality to avoid an increase in course length over what engineer soldiers currently undergo.

C.4.9.6 Safety. The Contractor shall establish a means of identifying, tracking and eliminating safety hazards that occur during the operation and maintenance of the BEB. Guidelines for the establishment of a safety system and for the identifying, tracking and reporting safety hazards are found in MIL-STD-882.

C.4.9.6.1 The Contractor shall identify hazards and assign to them a rating of the probability of occurrence and severity of occurrence. Mitigation efforts shall be identified to lessen the probability of occurrence and severity of resulting injury / damage.

C.4.9.6.2 The Contractor shall submit a Safety Assessment Report (SAR) to the Government (Reference CDRL A00E). This report will identify the hazards, their likelihood of occurrence, the severity of resulting injury / damage and the mitigation actions taken. Hazards that have severe consequences and cannot be eliminated by design changes shall be clearly identified. A report shall be submitted 30 days after the Preliminary Design Review. An assessment of static (initial) stability, reserve buoyancy, and estimation of operational limitations resulting from stability and buoyancy shall be included in the report. Additional reports will be prepared as needed and directed by the System Safety Working Group to support hazard tracking and analyses.

C.4.9.7 Health Hazards. The Contractor shall identify potential health hazards that are indigenous to and generated by the BEB. Health hazards shall be reported as part of the SAR. The Contractor shall take steps to eliminate hazards or reduce them to a level acceptable to the Government.

C.4.9.8 Soldier Survivability. The Contractor shall develop and implement a Soldier Survivability program to identify and manage these issues:

C.4.9.8.1 Detectability
C.4.9.8.2 Fratricide
C.4.9.8.3 Attack avoidance
C.4.9.8.4 Attack induced damage
C.4.9.8.5 System induced soldier injury
C.4.9.8.6 System induced soldier fatigue.

Management of these issues includes (as appropriate) analysis, simulation, test, evaluation and impact reduction. The Contractor shall identify soldier survivability shortfalls or issues and shall implement corrective action as directed by the Government. Soldier survivability issues may be reported separately or included in the SAR. Soldier survivability issues shall be reported in the same schedule as the SAR.

C.4.10 TRAINING REQUIREMENTS
C.4.10.1 Training Courses. The Contractor shall develop two training courses for the BEB. The first shall cover the skills necessary to perform the tasks in TM 5-1940-322-10 (Operator). The second shall cover the skills necessary to perform the tasks in TM 5-1940-322-25 (Field and National Maintenance). Training materials shall be developed in two forms: Instructor-Based and Self-Taught.
The Contractor shall create a Maintainer training package for the MKII-R, M2R, NSN 1940-01-547-4940 (re-power) boat with a Sabre engine. The Contractor shall take the final draft of the MKII-R, M2R, NSN 1940-01-547-4940 (re-power) boat Maintainer training package and update or modify the package as required with Sabre engine information to create a Maintainer training package of the MKII-R, M2R, NSN 1940-01-547-4940 that contains a Sabre engine. This training package shall be used to instruct soldiers in maintenance activities of the MKII-R, M2R, NSN 1940-01-547-4940 with Sabre engine.
This training shall be Instructor-Based Training. Training materials shall consist of a Training Course Outline, Program of Instruction (POI), Instructor Training Guide, Student Training Guide and Media Package (supplemental materials). Hands-on training shall constitute at least 70% of the instructional time. If the course of instruction runs less than 40 hours, the additional time shall be devoted to hands-on activities.
Maintainer training shall contain the following as a minimum:
a. Introduction to the program
b. Navigation through the program
c. BEB safety during maintenance
d. Basic operation and use of controls.
e. Description of these systems, component identification and operations:
1. Engine
2. Transmission and shafting
3. Propulsion jets and scoops
4. Steering
5. Battery charging and main power components
6. Console controls, gauges and alarms
7. Bilge pumps, fire extinguisher and safety systems
8. Fuel system
f. Maintenance Tasks
g. Troubleshooting techniques unique to the BEB
C.4.10.1.1 Training Plan. The Contractor shall develop a training plan that presents his approach to providing the materials described herein. The training plan shall be developed in Contractor format and shall be delivered to the Government, electronically, 75 days after contract award. The training plan shall include a schedule for the development of materials; it shall identify milestones and risk factors. The training plan will be discussed and the training program established at the next scheduled ILS meeting, approximately 90 days after contract award. Training materials shall then be developed in accordance with the approved training plan. The Training Plan shall be developed and submitted in accordance with CDRL A00M.

C.4.10.2 Instructor-Based Training. The Contractor shall develop two stand-alone courses, one for Operators and one for Maintainers. Training materials shall consist of a Training Course Outline, Program of Instruction (POI), Instructor Training Guide, Student Training Guide and Media Package (supplemental materials). Each course shall be 40 hours in length. Hands-on training shall constitute at least

70% of the instructional time. If the course of instruction runs less than 40 hours, the additional time shall be devoted to hands-on activities.

C.4.10.2.1 Training and Visual Aids. The Contractor is encouraged to use a variety of media and forms of materials as training aids. Computer technology (such as streaming videos, Internet links, slide shows and digital photographs) may be used in addition to traditional materials (such as charts, transparencies, pamphlets and diagrams). The Contractor shall identify, in the training plan, the computer hardware and software required to conduct the courses. The Government will advise the Contractor what resources are available, and what formats are acceptable at each training location. Training materials shall be provided in editable format when practicable. Materials shall be delivered free of restrictions on use and duplication.

C.4.10.2.2 Governing Documents. Instructor-Based training materials shall be developed and submitted in accordance with CDRL A00F.

C.4.10.3 Self-Taught Training. When directed by the Contracting Officer, through issuance of a delivery order, the Contractor shall revise the Training Plan to include Self-Taught (Distance Learning) course development. The Contractor shall provide two Distance Learning stand-alone courses with Computer-Based Interactive Training (CBIT) training materials. Course materials shall be formatted so that they can be viewed on standard computers loaded with the Windows operating system and Microsoft Suite products. These materials must be developed in the following format so that they are compatible with Government computer systems.

C.4.10.3.1 General Format. ToolBook, version 8.5 shall be utilized. No open scripting is allowed. Effects shall be developed using the Actions Editor, so that web enabling is possible. The final product shall be packaged to auto-install upon insertion of the CD. CBIT backgrounds shall be 9600 x 7200 pixels per page. Interactive Multimedia Instructor (IMI) backgrounds shall be 12000 x 9000 pixels per page. Digitized video shall be in Moving Picture Experts Group-1 (MPEG-1) format. Products shall be provided in editable format without proprietary locks. Products shall meet Joint Technical Architecture (JTA) version 6.5 guidelines for electronic media format. All products shall be delivered free of use restrictions and shall become the property of the Government upon delivery.

C.4.10.3.2 Registration Format. In the Properties for Book Menu, these selections shall apply:

C.4.10.3.2.1 General Tab: Save on close? Never. Prompt for reset? Yes (or check)
C.4.10.3.2.2 Book Title Tab: Distance Learning Course for Bridge Erection Boat, Operator or Distance Learning Course for Bridge Erection Boat, Maintainer as appropriate.
C.4.10.3.2.3 Author: PM Bridging
C.4.10.3.2.4 Description: Date published (mmddyy) PM Bridging.

C.4.10.3.3 CBIT Course Organization. Each course shall consist of two sections, a Demonstration Section, where information is presented, and an Evaluation Section, where comprehension is tested.

C.4.10.3.4 Operator Course Content. The Demonstration Section of the Operator course shall cover, at a minimum, these topics:

C.4.10.3.4.1 Introduction to the program
C.4.10.3.4.2 Navigation through the program
C.4.10.3.4.3 BEB operation safety
C.4.10.3.4.4 Location and description of major components
C.4.10.3.4.5 Location and description of controls
C.4.10.3.4.6 Operator PMCS and before and after operation checks
C.4.10.3.4.7 Boat operations to include:
C.4.10.3.4.7.1 Loading and unloading the boat from the cradle
C.4.10.3.4.7.2 Launching from the IBC
C.4.10.3.4.7.3 Raft building, and raft maneuvering (both methods)
C.4.10.3.4.7.4 Bridge building and bridge anchoring
C.4.10.3.4.7.5 Operation of the kits
C.4.10.3.4.7.6 Methods to recover a swimmer from the water
C.4.10.3.4.7.7 Recovery into the IBC
C.4.10.3.4.7.8 Operation under unusual conditions

C.4.10.3.5 Maintainer Course Content. The Demonstration Section of the Maintainer course shall cover, at a minimum, these topics:

C.4.10.3.5.1 Introduction to the program
C.4.10.3.5.2 Navigation through the program
C.4.10.3.5.3 BEB safety during maintenance
C.4.10.3.5.4 Basic operation and use of controls.
C.4.10.3.5.5 Description of these systems, component identification and operations:
C.4.10.3.5.5.1 Engine
C.4.10.3.5.5.2 Transmission and shafting
C.4.10.3.5.5.3 Propulsion jets and scoops
C.4.10.3.5.5.4 Steering

C.4.10.3.5.5 5 Battery charging and main power components
C.4.10.3.5.5.6 Console controls, gauges and alarms
C.4.10.3.5.5.7 Bilge pumps, fire extinguisher and safety systems
C.4.10.3.5.5.8 Fuel system
C.4.10.3.5.6 Maintenance Tasks
C.4.10.3.5.7 Troubleshooting techniques unique to the BEB

C.4.10.3.6 Governing Documents. Distance Learning training materials shall be developed and submitted in accordance with CDRL A00G.

C.4.10.4 Contractor Conducted Training.

C.4.10.4.1 Training Course One. The Contractor shall provide the personnel and materials to conduct one Operator and one Maintenance class. The courses shall be conducted at the Contractors facility. The Contractor shall provide all instructors, course materials, facilities, aids and consumables. The Contractor shall provide all computers and software required. A class shall consist of two Contractor-provided instructors and a maximum of 20 students. Each student hall receive a hard copy of the training materials.

C.4.10.4.2 Instructor and Key Personnel Training (I&KPT). The Contractor shall provide the personnel and materials to conduct one Operator and one Maintenance class in support of I&KPT. The courses shall be conducted at the Contractors facility. The Contractor shall provide all instructors, course materials, facilities, aids and consumables. The Contractor shall provide all computers and software required. A class shall consist of two Contractor-provided instructors and a maximum of 12 students. Each student shall receive a hard copy and an electronic copy of the training materials.

C.4.10.4.3 Initial New Equipment Training (NET). The Contractor shall provide the personnel and materials to conduct one Operator and one Maintenance class in support of the first fielding. Courses shall be conducted at a Government facility. The Contractor shall provide instructors and course materials (C.4.10.2). Facilities will be provided by the Government. The Contractor shall advise the Government what support is required beyond basic physical facilities (such as computers, black boards). A class shall consist of two Contractor provided instructors and a maximum of 14 students. Each student shall receive a hard copy of the training materials.

C.4.10.4.4 Follow-on NET. At the direction of the Contracting Officer, through issuance of a delivery order, the Contractor shall provide the personnel and materials to conduct Operator and Maintenance classes in support of system fielding as directed. Courses shall be conducted at Government facilities. The Contractor shall provide instructors and course materials (C.4.10.2). Facilities will be provided by the Government. The Contractor shall advise the Government what support is required beyond basic physical facilities (such as computers, black boards). A class shall consist of two Contractor-provided instructors and a maximum of 14 students. Each student shall receive a hard copy of the training materials. Courses will be called-up in any quantity and mixture of types at the Governments discretion.

C.4.10.5 Schedule. The Contractor shall submit draft training materials for review 270 days after contract award. The Government will review the materials. The Contractor shall update the materials, including the Government comments, and use them for Training Course One. The Contractor shall mark up the training materials after Training Course One and submit them within 30 days. The Government will review the materials. The Contractor shall update the materials, including the Government comments, within 60 days. The updated materials shall be used for I&KPT. The Contractor shall mark up the training materials after I&KPT and submit them within 30 days. The Government will review the materials. The Contractor shall update the materials, including the Government comments, within 60 days, and deliver them to the Government. This final form of the training materials shall be utilized for optional NET training. (A00F)

C.4.10.5.1 Training Material Updates. The Contractor shall update training materials after Shakedown Test training and I&KPT. Updates shall be based upon feedback from the students and shall include changes directed by the Government. Training materials shall be updated after NET training only if directed by the Government as an option.

C.4.10.5.2 Government Reviews. The Contractor shall provide training material development status updates at program review meetings. The Government will perform spot checks of materials under development to verify that schedules and technical standards are being maintained.

C.5 Testing and Evaluation

C.5.1 The Contractor shall examine, inspect and test the materials and components of the BEB as necessary to ensure compliance with ATPD 2317. The Contractor shall also support Government testing as specified herein.

C.5.2 In order to minimize the risk of deterioration of the performance and reliability of the BEB as a result of modification to various BEB systems, the Contractor shall perform, with Government participation, a subsystem design Failure Mode and Effects Analysis (FMEA) followed by component level analyses, using SAE J1739 as a guide. These subsystems shall include those with new and unique components such as, but not limited to, the Hydrojet and its hydraulic control, the new transmission, the engine cooling system, and the electrical charging system. Initial subsystem analyses shall be presented at the PDR with final results by the CDR. FMEA component level analyses and mitigating strategies shall be available by the CDR. (A00H)

C.5.3 Test Planning. The Contractor shall form a test planning team with the Government to examine all test issues, plan test

activities, identify testing to be conducted, publish a Test Plan and participate in the execution of tests in order to provide sufficient data concerning the BEB capabilities to make pertinent development decisions relative to the program. The draft Test Plan shall be delivered at the CDR in Contractor format. Specific test requirements follow.

C.5.3.1 Builders Trials (BT). The Contractor shall, jointly with the Government, develop a BT that incorporates the requirements of ATPD 2317 and provides sufficient BEB physical operation through various operating loads and speeds to demonstrate satisfactory BEB operation. The goal is a total test duration of approximately 8 hours on each BEB prior to Government acceptance.

C.5.3.2 Shakedown Test (ST). Shakedown Test will be conducted on two (2) BEBs. This test shall be conducted by the Contractor at a site mutually acceptable to the Government and the Contractor. It shall be of not less than 100 hours duration on each boat and shall simulate the following types of operation: Rafting, Bridging, Temporary Anchorage and Free Running. The Contractor, jointly with the Government shall devise test procedures to accomplish the 100 hour/boat test. The Government will provide a data collector/observer to tabulate test incidents occurring during the test.

C.5.3.3 Transportability Test. The Government may conduct a rail impact test on the BEB with the IBC. The Contractor shall support this test to ensure the BEB with the IBC successfully passes the rail impact test. All other transportation regulations shall be verified by inspection and analysis by the Contractor.
C.5.3.4 Engineering Change Proposal Evaluations. The Government may conduct tests and evaluations of hardware and procedures developed as Engineering Change Proposals (ECPs). The contractor shall support ECP tests at Government test sites by providing system support packages, test planning efforts, on-site and on-call technical representatives, collection of test data and analysis of test results. Support shall be tailored to each specific test and shall be separately negotiated. Test items shall be developed and provided as described in paragraph C.10 herein.
C.5.3.5 Government Follow-On Tests. The Government may conduct Follow-On Tests (FOTs) evaluations of hardware and procedures to support continued development and failure analysis of the BEB. The contractor shall support FOT tests by providing system support packages, test planning efforts, on-site and on-call technical representatives, collection of test data and analysis of test results. Support shall be tailored to each specific test and shall be separately negotiated. Test items shall be developed and provided as described in paragraph C.10 herein.
C.5.4 Contractor Test Schedule. The Contractor shall prepare and maintain an integrated test schedule showing all Contractor tests to be performed during the contract (component level, hardware/software, integration, system shakedown and others necessary as determined by the Contractor). The Contractor Test Schedule shall be made available at CDR. The Contractor shall notify the Government of the date, time, location and point of contact for each Contractor test at least 10 days prior to start of test so that the Government may observe, participate and collect data.

C.5.5 Test and Test Support Requirement. The Contractor shall perform all testing necessary to support the BEB program. All testing shall be performed at a site mutually agreeable to the Government and Contractor. The Contractor shall implement test preparations for the BEB test program. The Contractor shall provide all resources and equipment to complete the required tests.

C.5.5.1 Contractor test support shall include:

C.5.5.1.1 Failed parts tracking and failure analysis
C.5.5.1.2 Corrective action
C.5.5.1.3 Personnel

C.5.5.2 Transportation for Testing. The Contractor shall coordinate shipping of BEBs to and from test sites and other locations to meet test schedules and requirements for BEB availability at the direction of the Government. Specific requirements will be coordinated between the Government and Contractor. Delivery of boats to and from test sites will be at the Contractors expense.

C.5.6 Test Results and Corrective Actions. The Contractor shall provide test reports in Contractor format and make them available via electronic means within 10 working days from test completion. The Government shall have continuous access to all test data. In addition, the Contractor shall develop and maintain a failure reporting system to prioritize, track and manage failure analysis and corrective action activities resulting from failures detected during testing of the BEB. This database shall be in Contractor format and be made electronically available to the Government to facilitate proactive management of the performance and reliability of the BEB. The Contractor shall provide corrective action response to all test incidents as follows:

C.5.6.1 Major & Critical test incidents (causing mission failure or loss of essential function); Initial response 48 hours, Final response 30 days.
C.5.6.2 All Other incidents; Initial response 5 days, Final response 30 days
C.5.6.3 All approved configuration changes resulting from testing shall be incorporated into all production boats and documented per Attachment 2 at no additional cost.

C.5.7 Boat Refurbishment. Repair and upgrade of boats during tests shall focus on achievement of functions necessary to complete testing. After ST, the boats shall be updated to the approved final configuration and refurbished to like new condition. For planning purposes the ST boats will be delivered to the first fielded unit. Refurbishment will occur after the transportability test and will include the IBC.

C.5.8 Retest. The Government reserves the right to conduct additional inspections and tests prior to acceptance of any item containing new components, or if satisfactory resolution of any deficiency has not been completed. Costs for additional testing, if required, shall be the responsibility of the Contractor. If testing fails, the Contractor shall make appropriate corrections and retest at no additional cost to the Government.

C.6 Product Assurance

C.6.1 Quality Program. The Contractor shall develop, implement and maintain a quality system acceptable to the Government that ensures the functional and physical conformity of all products or services furnished under this SOW. The quality system shall achieve defect prevention and process control, providing adequate quality controls throughout all areas of SOW performance. The quality system shall be based on international quality standards such as the ISO 9000 series, or commercial, or national quality standards and shall be applicable to all areas of the Contractors organization. At any point during SOW performance, the Government has the right to review the quality system to assess its effectiveness in meeting SOW requirements.

C.6.1.1 Required Inspections/Tests. Every boat shall receive the following inspections / tests. The results of these inspections / tests shall be entered into the boat Final Inspection Record. (FIR)

C.6.1.1.1 Receiving inspection of the MK I, NSN 1940-01-105-5728/MK II, NSN 1940-01-218-9165 hulls. Document the degree of repair needed prior to installation of the upgrade package.
C.6.1.1.2 Documentation of serial numbers of major items and items with a manufacturers warranty. (Engines, Transmissions, Propulsion system), (Allows for future traceability)
C.6.1.1.3 Configuration inspection for completeness and compliance with the manufacturing standard.
C.6.1.1.4 Operational test/demonstration of all systems to ensure proper operation and hull integrity. (BT) Government acceptance

C.6.2 Certifications. The Contractor shall prepare and submit certifications for those items identified in Table I of the Purchase Description. The Contractor shall make available to the Government, upon request, quality certifications for vendor supplied components and material. All certifications provided by the Contractor shall include appropriate supporting documentation such as, but not limited to; test data, material analysis, drawings, purchase orders, specifications, etc. In the event that particular certifications are not acceptable to the Government, the Contractor shall conduct additional examinations and tests and/or provide additional documentation as required to verify conformance. A Contractors Certificate of Safety and Seaworthiness shall also be provided.

C.6.2.1 Re-Certification. The Contractor shall provide a new certification whenever a change is made to any item (process, product or material). Sub-contracting does not relieve the Contractor from providing the required certifications.
C.6.2.2 Welder Qualification. The Contractor shall provide certifications that the welder/welding equipment has passed qualifications. Copies of the certifications shall be provided to the Government upon request.
C.6.2.3 Weld Inspector Qualification. Weld quality and workmanship shall be verified by certified welding inspectors.

C.6.3 Final Inspection Record (FIR). In accordance with DI-QCIC-81068, and CDRL A00K the Contractor shall develop and maintain a FIR for each boat produced under this contract. The FIR shall list each system characteristic or function to be inspected from the requirements of ATPD 2317, along with any changes made elsewhere in the contract. The Contractor may prepare the FIR in Contractor format. As a minimum the FIR shall have blocks for the Contractor inspectors initials indicating that each characteristic or function was inspected and either accepted or rejected. Additionally, any rejected characteristic of function shall have another block for re-inspection and acceptance. Final review and acceptability shall be indicated by a signature block containing the full name and title of the company official rendering approval. The FIR will be reviewed and approved by the Government prior to implementation. The FIR shall be available for review prior to First Production Unit Inspection (FPUI) and First Article Evaluation. The Contractor shall update the FIR to reflect all engineering and/or manufacturing changes. Each update shall require Government review and concurrence prior to implementation. No boat shall be offered to the Government for inspection and acceptance prior to completion of the FIR.

C.6.3.1 Validation/Verification of the FIR. The Contractor and Government shall conduct a joint final inspection of the first boat produced utilizing the newly developed FIR. The purpose of this inspection is to perform a final validation and verification of the FIR.

C.6.3.2 Boat Final Inspection. The Contractor shall utilize the FIR to inspect each boat produced. Deficiencies detected shall be noted on the FIR deficiency sheet, and corrected by the Contractor prior to offering the boat to the Government for final acceptance. The original FIR and a copy shall be submitted along with each boat.

C.6.4 Test and Production Location. The Contractor shall produce the first production unit and the production quantity at the same location and facility. If any boats are impacted by a change of the Contractors manufacturing facility, a complete FPUI and ST, as a minimum, may be required at no increase in contract cost.

C.6.5 Change of Suppliers. If the Contractor elects to change sources of supply for any component after conditional acceptance of the FPUI boat, the Government reserves the right to conduct additional inspections and tests prior to acceptance of any item containing the new component. The Contractor shall notify the Government 30 days prior to a change in suppliers.

C. 6.6 Configuration. The BEB shall comply with all the requirements of this SOW including but not limited to the ATPD 2317. All

systems delivered under this SOW shall be identical in configuration. The unit configuration shall consist of all Government approved product specifications, product drawings, and associated documents. The Contractor shall identify and document all configuration changes between the FPUI through final approved configuration of the boat.

C.6.7 Shakedown Test (ST). As required by contract, the ST is a test of the end item conducted by the Contractor at a Contractor test site with Government oversight. The ST evaluates the complete boat with all kits installed for conformance to technical requirements and confirms that the design is ready for production. The ST is conducted in accordance with an approved test plan. Table 1 of ATPD 2317 identifies the system and functions that will be evaluated. The ST may be repeated or continued to verify that corrective actions resulting from the initial ST are effective.

C.6.8 Follow-on Production Test (FPT). When required by the contract, one production unit shall undergo follow-on production testing by the Contractor at the Contractors test site to evaluate continued conformance to Section 3, ST requirements as referenced in Table I of ATPD 2317. The test shall be similar to ST but will be limited in scope. The Government will select the test unit. Any deficiencies found during or as a result of the FPT, may result in Government stopping acceptance on subsequent boats until the Contractor has corrected the conditions causing the failures. All corrective actions carried out as a result of the deficiencies found during or as a result of FPT, may be successfully demonstrated during a full retest to the portion of the FPT as directed by the Government at no additional cost to the Government.

C.6.9 First Production Unit Inspection (FPUI). The Contractor shall perform a final inspection of the first produced boat in accordance with the requirement specified in ATPD 2317. All deficiencies detected during FPUI will be corrected prior to acceptance by the Government. All deficiencies corrected as a result of FPUI will be completed by the Contractor at no additional cost to the Government. In the event of a major component change (engine, transmission, or propulsion system) an additional FPUI will be conducted consisting of inspecting and verifying the new component and their associated hardware.

C.6.9.1 First Production Unit Acceptance. The Contractor shall submit an inspection report that provides detailed results of the FPUI. The contracting officer will notify the Contractor of approval or disapproval of the FPUI. If FPUI is disapproved and additional inspections are required, the Contractor shall resubmit an inspection report. All costs related to additional FPUI shall be borne by the Contractor.

C.6.9.2 Manufacturing Standard. The FPUI unit shall be retained by the Contractor as the manufacturing standard (facility boat) and may be shipped as part of the contract quantity at a later date. All approved changes throughout the life of the contract will be incorporated into this boat. At the discretion of the Government, a newly produced unit with the latest configuration (of incorporated changes) may be selected to represent the manufacturing standard (FPUI). The Government will verify that the latest ECP changes are incorporated into this unit.

C.6.10 In Process Inspections. During production of the BEB, in-process inspections shall be performed on every boat produced by the Contractor, to evaluate conformance to the Section 3 requirements referenced in Table I of ATPD2317. These inspections may be witnessed by Government representatives. The Contractor shall identify and establish in-process inspection points and inspections where the absence of such inspections could adversely affect quality. In addition, evaluation of process controls and workmanship will be made at this time. During the inspection, the Contractor shall have available for review and evaluation the following records: quality manual (or appropriate document), work instructions, process procedures, inspection records, and welder certifications. All processing and welding procedures, inspection records, calibration procedures and welder certifications shall be available for review and evaluation. When required by the Government, these inspections shall be made prior to the application of primer and paint. Each assembly operation shall have a process sheet that calls out what operation takes place at each station. A completed process sheet will be signed off by the operator /assembler prior to movement to the next station. A routing sheet (traveler) reflecting these operations will be attached to each hull throughout its entire build process.

C.6.11 Inspection Equipment. The Contractor shall supply, maintain and calibrate all inspection and test equipment necessary to assure the boat system and components conform to SOW requirements. All inspection equipment shall be available for use at the start of production, and shall be available to the Government inspector when required for verification purposes.

C.6.12 Inspection Records. The Contractor shall maintain and make available to the Government all records of examinations and tests performed on material used to produce each boat. This documentation shall describe deficiencies found during inspection and all corrective action undertaken to correct these deficiencies. These records shall be maintained for a period of four years following completion of the contract.

C.6.13 Government Furnished Material. The Contractor shall conduct an inspection on Government Furnished Material and provide for its secure storage. Any deficiencies should be reported on the Product Quality Deficiency Report (PQDR) SF-368 (reference CDRL A00L). A detailed list of Goverment Furnished Material will be provided 10 days after award.

C.6.14 Component Interchangeability. The Contractor and his sub-Contractors shall not make any changes to any component part or end item without the Governments approval after acceptance of the First Production Unit Inspection (FPUI). In order to determine whether proposed changes should be approved, the Government reserves the right to conduct another test similar to the ST at the Contractors expense.

C.6.14.1 Additional Testing. The Government reserves the right to require additional testing at Contractor expense in the event any Contractor-proposed engineering change is felt to have a potential impact on the ability to meet the requirements of ATPD 2317.

C.6.14.2 Control Test. Control tests may be performed at any time if there is reason to believe that production boats do not meet the technical requirements of ATPD 2317. Control tests are the responsibility of the Contractor.

C.6.15 Deficiencies. All deficiencies detected by either the Contractor or the Government shall be presumed to be present on all boats produced since the last acceptable test. The Government may stop acceptance of additional boats until satisfactory evidence has been provided that indicates the deficiencies are not present on all boats produced since the last acceptable test and corrective action has been taken to repair deficiencies and preclude recurrence. Failure to provide corrective action or request an extension within five working days after detection of the deficiency(s) may result in the Government stopping acceptance on subsequent boats until the conditions causing failures have been corrected and approved by the Government. Request for extensions, at a minimum, shall state purpose of the extension and establish a completion date for determining the extent of the deficiency. Approval of the request will be at the discretion of the Contracting Officer. At the Governments discretion, another boat with corrective actions implemented may be subjected to re-test to verify the corrective actions.

C.6.16 Quality Deficiency Reports (QDRs). Quality Deficiency Reports (QDRs), Standard Form 368, are generated by users to report problems with equipment. The Contractor shall investigate and provide failure analysis and corrective action to all QDRs generated against product/supplies produced under this SOW. The Contractor shall provide a report in accordance DI-RELI-81315, and CDR. The Contractor shall perform the investigation; identify probable cause of failure, and corrective action. The Contractor shall provide replacement parts for all components determined to be deficient in design, workmanship or product conformance. Corrective action shall be at no additional cost to the Government. Corrective action requiring configuration changes shall not be implemented without Government approval.

C.6.16.1 The Contractor shall respond to Category 1 QDRs within 48 hours. Category 1 defects are items relating to:

Death, injury or job-related illnesses
Loss or major damage to the system

C.6.16.2 The Contractor shall respond to Category 2 QDRs within 30 days using SF 368.

C.6.17 Warranties. The Contractor shall manage a warranty program and provide a warranty on the boat and its components for 12 months starting on the date of customer handoff. Defects in the manufacturing and/or assembly shall be corrected at the Contractors expense for a period of one year after customer handoff. If boats are placed in storage before being put in service, the warranty period shall not start until each such boat is withdrawn from storage and issued to a customer. The Contractor shall provide the Government with warranty coverage for components beyond one year from the date of customer handoff to the extent that the Contractors supplier customarily provides warranty coverage beyond 12 months to their commercial customers. The details of the warranty coverage shall be contained in the technical manuals. The Contractor shall provide a point of contact for warranty issues.

C.7 Preparation for Delivery

C.7.1 Packaging. Each BEB shall be delivered complete, with all components and Basic Issue Items (BII). The mast shall be secured in the lowered position. The cabin cover shall be off and secured within the forward cockpit. The searchlight, BII and easily pilferable items shall be packaged and secured for rail shipment. Packaging requirements shall be as specified in the contract.

C.7.2 Packaging for Shipment. The boat shall be prepared for shipment by the Government to the fielding location(s). The Contractor shall ensure that all items of the BEB are securely stored and the BEBs ready for loading on either trucks or railcar (this will depend on the location of the shipyard and the convenience of a railhead). The Contractor shall be responsible for ensuring the BEBs are properly loaded onto the conveyance method used by the Government.

C.7.3 Shipment Condition. Each BEB shall be serviced prior to shipment as follows, unless otherwise specified in the contract. The BEB shall be shipped ready for storage.

C.7.3.1 Fluids, Lubricants and Fuel. The cooling, lubricating and hydraulic systems shall be filled to the manufacturers recommended levels. The fuel system shall be dry. Dry means essentially no fuel, with the system purged to the degree necessary to ship the BEB by rail. Preservative-type oils shall be used when the boat will be subjected to long-term storage. Preservative-type oils shall be used only when directed by the Government. Raw water systems shall be drained down to prevent corrosion and growth of fouling.

C.7.3.2 Electrical System. The batteries shall be disconnected and the terminals protected against shorting. Exposed connectors shall be protected against weather damage by wrapping, plugs or caps.

C.7.3.3 Bilges. The bilges shall be clean and dry. The drain plug shall be open.

C.7.4 Storage Prior to Shipment. The Contractor shall be responsible for storing the BEBs at his facility prior to shipment by the Government. The Government will be fielding the BEBs in a unit set of 14. The Contractor shall be responsible for ensuring that the

BEBs are properly stored and any special care and storage requirements are accomplished while the BEBs are at the Contractors facility awaiting shipment. The Contractor shall be responsible for the physical security of the BEB and all equipment specified in C.7.1.

C.8 Other Requirements

C.8.1 Kits. The Contractor shall provide all provisions (electrical, mounting locations, etc.) on each BEB to accept the kits required in the ATPD 2317 (NAVKIT, Radio, Heater). The Contractor shall provide two of each kit for use in testing and production of the BEB, with the exception of the SINCGARS standard equipment. Additionally the Contractor shall include in Section B the price for installation of all kits on the BEB. For planning purposes the following information is included for pricing of the installed kits:

C.8.1.1 NAVKIT 5 BEBs will have this kit installed.
C.8.1.2 Radio Kit 5 BEBs will have this kit installed.
C.8.1.3 Heater Kit Not installed units may order though supply system

C.8.2 Not Used

C.8.3 Optional Painting and Markings. Boats shall be provided in solid-color green topcoat unless otherwise required by Section B of the contract. The Government may order boats in the colors listed below at the price established in Section B of the contract:

Solid Tan 686, color chip 33446 IAW FED-STD-595.
Three-color woodland Camouflage, consisting of Green 383, chip 34094, Brown 383, chip 30051 and Black, chip 37030.

C.8.3.1 The three-color camouflage pattern is shown on drawing 97403-13226E7222. The Government will provide this drawing when camouflage topcoat is required. The Contractor shall apply the topcoat, with the color demarcations within +/- one inch of the indicated pattern. The Contractor shall develop templates and work instructions, as necessary, to ensure that the pattern conforms to the drawing. Painted informational markings shall be Black when applied over Tan, Green or Brown backgrounds. Informational markings shall be Green when applied over a Black background. The NAVKIT components, label plates, information tags and decals shall be the same colors regardless of background paint color.

C.8.4 Conversion of MK I, NSN 1940-01-105-5728 BEB hulls to MK II, NSN 1940-01-218-9165 BEB hull standards. The Contractor shall convert MK I, NSN 1940-01-105-5728 BEB hulls to MK II, NSN 1940-01-218-9165 hull standards in accordance with Attachment 2 to this Statement of Work at the price established in Section B. The Government will identify at time of call-up the quantity of MKI, NSN 1940-01-105-5728 BEB hulls to be converted.

C.9 Correction of Design Deficiencies

C.9.1 In recognition of the limited Government testing of the BEB, the Contractor agrees that design deficiencies discovered during the first six months after initial fielding will be the responsibility of the Contractor to correct and incorporate into all BEBs produced under this contract.

C.9.2 The Contractor shall be responsible for any additional testing required as well as the submission of updated configuration management documents (drawings, specifications, etc.) and logistics products related to the correction.

C.10 ADDITIONAL CLAUSES

C.10.1 Battle Damage Assessment Repair (BDAR). At the direction of the Contracting Officer, through issuance of a delivery order,the Contractor shall provide a Battle Damage Assessment Repair (BDAR) procedures and instructions to be used in the event the BEB is damaged in battle, as described in paragraph C.4.6.6, at the price established in Section B. The Contracting Officer may issue an order for the item at any time from the date of contract award through the forty eighth (48) month of the contract by giving written notice to the Contractor. The procedures shall be submitted 90 days after the order is issued.

C.10.2 Test SSP. At the direction of the Contracting Officer, through issuance of a delivery order, the Contractor shall provide a test System Support Package (SSP) for use in testing the BEB, as described in paragraph C.4.8.1.2, at the price established in Section B. The Contractor shall deliver the SSP to the Government test site thirty days prior to the test. The Contractor shall replenish any item used from the SSP during testing. The Contracting Officer may issue an order for the item at any time from date of contract award through the fiftieth (50) month of the contract by giving written notice to the Contractor.

C.10.3 Contractor Technical Support. At the direction of the Contracting Officer, through issuance of a delivery order, the Government may add Contractor technical support as described in paragraph C.4.8.4, and the Contractor shall provide technical support to the Government during testing or logistics events. For planning purposes no more than 60 days per event are envisioned. The Contractor shall provide up to 600 man days of Contractor technical support at the price established in Section B. The Contracting Officer may issue an order from the date of contract award through the fiftieth (50) month of the contract by giving written notice to the Contractor.
C.10.4 Contractor Fielding Support. At the direction of the Contracting Officer, through issuance of a delivery order, the Contractor shall provide Contractor fielding support as described in paragraph C.4.8.5 to support fielding of the BEB. For planning purposes no

more than 2 Fieldings per year are anticipated. The Contractor shall provide up to 600 man days Contractor fielding support at the price established in Section B. The Contracting Officer may issue an order from the date of contract award through the fiftieth (50) month of the contract by giving written notice to the Contractor.

C.10.5 Self Taught Training Option. At the direction of the Contracting Officer, through issuance of a delivery order, the Contractor shall provide self-taught training as described in paragraph C.4.10.3, at the price established in Section B. The Contractor shall develop two self taught training courses (operators and maintainers). The training courses shall be delivered within 180 days of request. The Contracting Officer may issue an order from the date of contract award through the fiftieth (50) month of the contract by giving written notice to the Contractor.

C.10.6 Follow-on NET. At the direction of the Contracting Officer, through issuance of a delivery order, the Contractor shall provide additional follow-on new equipment training (NET) as described in paragraph C.4.10.4.4. The Contractor shall provide up to 20 New Equipment Training sessions at the price established in Section B. The order may be issued individually depending on the needs of the unit being fielded. For planning purposes two courses per fielding are anticipated. The Contracting Officer may issue an order from the date of contract award through the fiftieth (50) month of the contract by giving written notice to the Contractor.

C.10.7 Follow-on Production Test. At the direction of the Contracting Officer, through issuance of a delvery order, the Contractor shall provide additional follow-on production testing as described in paragraph C.6.8. The Contractor shall provide one follow-on production test per production year (PY2, PY3, PY4, and PY5) at the price established in Section B. The Contracting Officer may issue an order for this effort from the date of contract award through the fiftieth (50) month of the contract by giving written notice to the Contractor.

C.10.8 Kits. At the direction of the Contracting Officer, through issuance of a delivery order, the Contractor shall provide additional NAVKITs as described in paragraph C.8.1. The Contracting Officer may issue an order at the time of program year call-up.

C.10.9 Optional Paint Colors. At the direction of the Contracting Officer, through issuance of a delivery order, the Government may order BEBs each program year in colors other that the standard green as described in paragraph C.8.3. The Contracting Officer may issue an order at the time of program year call-up.

C.10.10 Conversion of MK I, NSN 1940-01-105-5728 BEB Hulls to MK II, NSN 1940-01-218-9165 BEB Hull Standards. At the direction of the Contracting Officer, through issuance of a delivery order, the Contractor shall convert of MK I, NSN 1940-01-105-5728 BEB hulld to MK II, NSN 1940-01-218-9165 BEB standards as described in paragraph C.8.4. The Contracting Officer may issue an order for this at the time of program year call-up.

C.10.11 Additional Bridge Erection Boats. At the direction of the Contracting Officer, through issuance of a delivery order, the Contractor shall provide additional Bridge Erection Boats at the price established in Section B. The Contracting Officer may issue an order for this at anytime from date of contract award/program year call-up for a period of twelve (12) months, by giving written notice to the Contractor.
C.10.12 AFES ECP Development. The contractor shall develop and submit an ECP to install an automatic fire extinguishing system (AFES) into the USCSB MK 2 and USCSB MKII-R, M2R, NSN 1940-01-547-4940 boats. The AFES shall utilize the MK II-S, M2S, NSN 1940-01-526-0770 BEB FM200 system components to the greatest degree practicable. The AFES shall be designed for field installation at unit level.
C.10.12.1 Documentation. The AFES ECP effort includes the installation instructions, drawing record amendment, red-lined drawings of the MK II, NSN 1940-01-218-9165 foam installation drawing depicting the 'after' condition, red-lined drawings of the MK II, NSN 1940-01-218-9165 equipment installation drawing depicting the 'after' condition, drawings of new items (such as brackets, panels), packaging, kit parts list and red-lined technical manuals. The red-lined technical manuals shall include the Operator's, Maintenance, Lubrication Order (LO) and Repair Parts and Special Tools (RPSTL) publications. Redlines shall include, but are not limited to, operation, maintenance, checks and services, cautions and warnings and identification of components.
C.10.12.2 Hardware. The AFES ECP effort includes the fabrication of two (2) complete kits and one (1) set of draft installation instructions and one (1) set of draft operating instructions. The hardware and instructions shall be delivered to the Government test site at Aberdeen Proving Ground, MD.
C.11 The following alterations to the rifle mount location are to be performed on all Bridge Erection Boats.

C.11.1 Remove one upper catch and one butt holder from the starboard side.

C.11.2 Move the remaining upper catch to a position midway between the present upper catch positions. Rotate the upper catch 180 degrees so that the rifle leans away from the gunwale.

C.11.3 Rotate the butt holder 90 degrees. Adjust its position relative to the upper catch so that the rifle can be secured in the orientation. Magazine towards the bow, front sight hood protected by the gunwale.

C.11.4 Plug the resulting holes using blind rivets.

C.11.5 Install the second set of mount components on the port side. The installation to mirror that on the starboard side. It is acceptable to partially block the noise warning sign.

C.12.0 Scope. This statement identifies the Contractors responsibilities to establish and operate and maintain Interim Contractor Logistics Support (ICLS) for the MK II, NSN 1940-01-218-9165 BEB. This effort supplements the established ILS system and ensures availability of parts and services during early fielding. The ICLS includes an on-site representative. This support will be provided to the 362nd Multi-Role Bridge Company (MRBC) at Fort Benning, GA. from April 18, 2005 to July 29, 2005. This statement also covers evaluation of boat assets, identification of fixes and repair and transport to fielding site.

C.12.1 Support Requirements

C.12.1.1 On-Site Representative. The Contractor shall provide a minimum of one person to provide hands-on logistics support. This person is referred to as the Field Service Representative (FSR). The FSR will be co-located with the 362nd MRBC during training and fielding periods (on-site days listed below) and be on-call from the Contractors location at other times.

On-site days: 18 Apr to 22 Jun 2005 and 11 Jul to 29 Jul 2005
On-call (response time within 48 hours): 23 Jun 2005 to 10 Jul 2005.

C.12.1.2 FSR Duties:
C.12.1.2.1 Function as the Contractors on-site representative.
C.12.1.2.2 Assist in troubleshooting and provide on-the-job troubleshooting training.
C.12.1.2.3 Assist with maintenance and provide on-the-job maintenance training.
C.12.1.2.4 Coordinate activities of engine and water jet service technicians.
C.12.1.2.5 Serve as a communications link between the PM and the unit.
C.12.1.2.6 Provide technical services in support of the fielding event.
C.12.1.2.7 Identify trends in parts consumption and provide this information to the Government.
C.12.1.2.8 Serve as local warranty administrator.
C.12.1.2.9 Assist in shipping and tracking the return of items to off-post repair facilities.

C.12.1.3 FSR Duty Station. The 362nd MRBC home station is in the metropolitan Columbus Georgia area, specifically at Fort Benning.

C.12.2 Work Flow Concept. The 362nd will attempt to perform a service on and order parts through normal channels. If the service cannot be performed or the part cannot be obtained, then the unit will request assistance from the FSR. Typical events will be inability to troubleshoot a problem, inability to identify a part, inability to obtain a part, inability to install a part and inability to adjust or tune a system after repairs are complete. The FSR will assist the unit as necessary and record the services provided. The FSR will provide a weekly status report (in his format) to the Government detailing the services provided, the parts consumed, backorders, trends seen in the consumption of parts and recommendations for changes to training, technical manuals and hardware. Safety issues shall be separately reported within 24 hours of identification directly to the COR.

C.12.3 Metrics

C.12.3.1 Parts Turnaround Time. The level of urgency will be determined by the unit at the time of order. Urgent requirement parts (Priorities 1-3) shall be delivered within 2 working days. Routine requirement parts (Priorities 4-8) shall be delivered within 5 working days. Low priority requirement parts (Priorities 9-15) shall be delivered within 10 working days.

C.12.3.2 Measures of Effectiveness. Performance levels applied to this Contract are to maintain the boats at a 90% operational readiness rate (ORR).

C.12.4 MKII, NSN 1940-01-218-9165 BEB, Physical Condition Verification. Eight (8) MK II, NSN 1940-01-218-9165 boats will be delivered to Silver Ships Inc. for inspection and repair as described herein. The Contractor shall receive, store, and inspect the boats for wear or damage. The Contractor shall develop emergent work cost estimates which they will present to Government for approval. The work will be initiated following technical Government approval. Following inspect and repair; the Contractor shall ship the boats from their location to 362nd at Ft. Benning. DODAAC: W91DZ4, Mark for Property Book Officer CW3 Charles Moss to arrive on 7 Jul 2005.

C.12.4.1 MKII, NSN 1940-01-218-9165 BEB Basic Issue Items (BII). The Contractor shall procure, store, assemble and ship fourteen (14) sets of MK II, NSN 1940-01-218-9165 BEB BII to the 362nd. Six (6) MKII, NSN 1940-01-218-9165 BEB BII sets shall be delivered to DODAAC: W91DZ4, Mark for Property Book Officer CW3 Moss to arrive on 14 Apr 2005 for training. The remaining eight (8) MKII, NSN 1940-01-218-9165 BEB BII sets will be overpacked with the eight MKII, NSN 1940-01-218-9165 boats to arrive at Ft. Benning on 7 Jul 2005.

C.12.4.2 MKII, NSN 1940-01-218-9165 BEB Training Effort. The Contractor shall develop an Operators Program Of Instruction (POI) for the MKII, NSN 1940-01-218-9165. The Contractor shall provide one MKII, NSN 1940-01-218-9165 Operator class on 18-22 Apr 2005 at 362nd, Fort Benning, GA. The Government will provide one MK II, NSN 1940-01-218-9165 boat to the Contractor of POI developers use. The Contractor shall familiarize themselves with the MKII, NSN 1940-01-218-9165 configuration in order to draft the POI. This boat shall be shipped to 362nd at Fort Benning to arrive on 14 Apr 2005.

C.12.5 Government Point of Contact

C.12.5.1 Performance issues, safety and status reports shall be provided to the Contracting Officers Representative (COR) (Ms. Donna

Morgan, PM CE/MHE, email address: morgand@tacom.army.mil).

C.12.6 Reviews and Meetings. The Contractor shall present at scheduled reviews status of his efforts to support the 362nd MRBC to include discussions on any open or closed action taken by the Contractor. The timeframe for this reporting is from Apr Jul 20.

C.12.7 The Contractor shall receive, inspect, identify and recommend corrections for deficiencies on boats; and transport those that are targeted for fielding. The United States Gov will approve or disapprove the repair list. Additional spares and kits required for fielding will be provided by the Contractor.

*** END OF NARRATIVE C 0006 ***

SECTION J - LIST OF ATTACHMENTS

List of Addenda	Title	Date	Number of Pages	Transmitted By
Exhibit A	CONTRACT DATA REQUIREMENTS LIST (CDRL)	18-FEB-2004	001	EMAIL
Exhibit B	CONTRACT DATA REQUIREMENTS LIST (CDRL)	01-OCT-2006	023	DATA
Exhibit C	DATA ITEM DESCRIPTION (DID)	12-APR-2006	001	DATA
Attachment 001	PERFORMANCE BASED PURCHASE DESCRIPTION (ATPD)	05-APR-2004	013	DATA
Attachment 002	CONFIGURATION MANAGEMENT DOCUMENTATION	03-MAR-2004	005	DATA
Attachment 003	MILESTONE BILLING SCHEDULE	20-SEP-2004	001	EMAIL
Attachment 004	MILESTONE BILLING SCHEDULE	27-JAN-2005	001	EMAIL
Attachment 005	ASL, UNIT LEVEL & SUSTAINMENT TOOLS AND STANDALONE SUSTAINMENT LEVEL TOOLS	22-NOV-2005	002	DATA
Attachment 006	MILESTONE BILLING SCHEDULE	27-MAR-2007	003	DATA
Attachment 007	LISTING OF MKI AND MKII ITEMS TO SALVAGE FROM GFP	03-APR-2007	001	DATA
Attachment 008	GOVERNMENT FURNISHED PROPERTY,CDR BOAT SERIAL NO. 0360	06-SEP-2006	001	DATA

*** END OF NARRATIVE J 0004 ***

Exhibit A has been replaced by Exhibit B. Exhibit B has been renumbered and contains 23 pages.

*** END OF NARRATIVE J 0005 ***

Exhibit A has been replaced under P00009 to this contract by Exhibit B.

CONTRACT DATA REQUIREMENTS LIST Form Approval OMB No. 0704-0188

A. CONTRACT LINE ITEM NO.:
B. EXHIBIT: B
C. CATEGORY: PMO
D. SYSTEM/ITEM: BRIDGE ERECTION BOAT
E. CONTRACT/PR NO.:
F. CONTRACTOR: FBM - BABCOCK

1. DATA ITEM NO. A001
2. TITLE OF DATA ITEM: Master Integrated Program Schedule (MIPS)
3. SUBTITLE:
4. AUTHORITY (Date of Acquisition Document No.) DI-MGMT-81650
5. CONTRACT REFERENCE: C.1.3.2
6. REQUIRING OFFICE: SFAE-CSS-FP-E
7. DD250 REQ: LT
8. APP CODE:
9. DIST. STATEMENT REQUIRED:
10. FREQUENCY: SEE ITEM 16
11. AS OF DATE: SEE ITEM 16
12. DATE OF FIRST SUB: SEE ITEM 16
13. DATE OF SUBS. SUB: SEE ITEM 16
14. DISTRIBUTION

A. ADDRESSEES	B. COPIES DRAFT	FINAL Reg	FINAL Repro
SFAE-CSS-FP-E		1	

15. TOTAL: X 1 X

16. REMARKS:
4. Contractor format in accordance with C.1.3.2

10, 11, 12, 13 Initial submission concurrent with Start of Work Meeting. Update and resubmit concurrent with subsequent reviews or as needed.

Electronic copy delivery to Email as follows:

SFAE-CSS-FP-E = donna.morgan@us.army.mil

17. PRICE GROUP:
18. ESTIMATED TOTAL PRICE:
G. PREPARED BY: Michael Herlevi H. DATE: 1 Oct 06
I. APPROVED BY: Donna Morgan J. DATE: 1 Oct 06

A. CONTRACT LINE ITEM NO.:
B. EXHIBIT: B
C. CATEGORY: CM
D. SYSTEM/ITEM: BRIDGE ERECTION BOAT
E. CONTRACT/PR NO.:
F. CONTRACTOR: FBM - BABCOCK

1. DATA ITEM NO. A002
2. TITLE OF DATA ITEM: Minutes of Meetings and Reviews
3. SUBTITLE:
4. AUTHORITY (Date of Acquisition Document No.) SEE ITEM 16
5. CONTRACT REFERENCE: C.1.3.3
6. REQUIRING OFFICE: SFAE-CSS-FP-E
7. DD250 REQ: LT
8. APP CODE: LT
9. DIST. STATEMENT REQUIRED: A
10. FREQUENCY: SEE ITEM 16
11. AS OF DATE: SEE ITEM 16
12. DATE OF FIRST SUB: SEE ITEM 16
13. DATE OF SUBS. SUB: SEE ITEM 16

14. DISTRIBUTION	A. ADDRESSEES	B. COPIES DRAFT	FINAL Reg	FINAL Repro
	SFAE-CSS-FP-E		1	
15. TOTAL:		X	1	X

16. REMARKS:

4. Minutes shall be in Contractor format.

10, 11, 12, 13 Contractor shall provide an electronic copy to SFAE-CSS-FP-E no later than five working days from the date of the meeting. The official copy shall be retained by the addressee in 14a.

Electronic copy delivery to Email as follows: SFAE-CSS-FP-E = donna.morgan@us.army.mil

17. PRICE GROUP:
18. ESTIMATED TOTAL PRICE:
G. PREPARED BY: Michael Herlevi H. DATE: 1 Oct 06
I. APPROVED BY: Donna Morgan J. DATE: 1 Oct 06

A. CONTRACT LINE ITEM NO.:
B. EXHIBIT: B
C. CATEGORY: CM
D. SYSTEM/ITEM: BRIDGE ERECTION BOAT
E. CONTRACT/PR NO.:
F. CONTRACTOR: FBM - BABCOCK

1. DATA ITEM NO. A003
2. TITLE OF DATA ITEM: Drawings
3. SUBTITLE:
4. AUTHORITY (Date of Acquisition Document No.) DI-DRPR-81003A
5. CONTRACT REFERENCE: Attachment 2 - Configuration MGT Documentation, paragraph 3.2.2.1, 3.2.2.2, 3.2.2.3.
6. REQUIRING OFFICE: SFAE-CSS-FP-E
7. DD250 REQ: LT
8. APP CODE: A
9. DIST. STATEMENT REQUIRED: A
10. FREQUENCY: SEE ITEM 16
11. AS OF DATE: SEE ITEM 16
12. DATE OF FIRST SUB: SEE ITEM 16
13. DATE OF SUBS. SUB: SEE ITEM 16

14. DISTRIBUTION	A. ADDRESSEES	B. COPIES	DRAFT	FINAL	
				Reg	Repro
	SFAE-CSS-FP-E*		1	1	
	SFAE-CSS-FP-E**		1	1	
	SFAE-CSS-FP-E***		1	1	
15. TOTAL:			3	3	X

16. REMARKS:
4. Contractor format with content per SOW 3.2.1 using guidance taken from ASME Y14.24, Y14.34, ASME Y14.100, DOD-STD-0100(AR) and MIL-DTL-31000B.

Format for Fold-Outs: per MIL-HDBK-1222B, Figures B30 and B31.

10, 11, 12, 13. Provisioned Items: Submit draft with provisioning data. Submit final within 90 days after initial submission. Printable electronic format. Acceptance of provisioning data is acceptance of drawing. (*)
Fold-Out Items: Submit drafts concurrent with submission of manuals that contain them. Submit final with submission of final manuals. Format to match manuals format. Acceptance of the manual(s) is acceptance of the drawing. (**)
All other Drawings: Submit drafts concurrent with start of production. Submit final drawings concurrent with the Configuration Audit. All drawings submitted in printable electronic format. (***)

Contractor shall retain original electronic files.
Electronic copy delivery to Email as follows: SFAE-CSS-FP-E = donna.morgan@us.army.mil

17. PRICE GROUP:
18. ESTIMATED TOTAL PRICE:
G. PREPARED BY: Michael Herlevi H. DATE: 1 Oct 06
I. APPROVED BY: Donna Morgan J. DATE: 1 Oct 06

A. CONTRACT LINE ITEM NO.:
B. EXHIBIT: B
C. CATEGORY: CM
D. SYSTEM/ITEM: BRIDGE ERECTION BOAT
E. CONTRACT/PR NO.:
F. CONTRACTOR: FBM - BABCOCK

1. DATA ITEM NO. A004
2. TITLE OF DATA ITEM: Wrap-Up Deliveries
3. SUBTITLE:
4. AUTHORITY (Date of Acquisition Document No.) SEE ITEM 16
5. CONTRACT REFERENCE: SOW ATTACHMENT 2, paragraphs 3.2.2.5, 4.5.4
6. REQUIRING OFFICE: SFAE-CSS-FP-E
7. DD250 REQ: LT
8. APP CODE: LT
9. DIST. STATEMENT REQUIRED: A
10. FREQUENCY: SEE ITEM 16
11. AS OF DATE: SEE ITEM 16
12. DATE OF FIRST SUB: SEE ITEM 16
13. DATE OF SUBS. SUB: SEE ITEM 16

14. DISTRIBUTION	A. ADDRESSEES	B. COPIES	DRAFT	FINAL	
				Reg	Repro
	SFAE-CSS-FP-E*		1	1	1
	SFAE-CSS-FP-E**		1	2	
15. TOTAL:			X	3	1

16. REMARKS:
4. Final delivery of materials upon contract close-out. Drawing format and content per 3.2.1 (inclusive). TDP format and content per 3.1, 4.2, 4.4, 4.5, 4.5.1, 4.5.2 and 4.5.3.

10, 11, 12, 13
*Submit drawings electronically. One copy in printable format (.DWF, PDF, etc.). One copy in alterable format compatible with AutoCAD (.DWG). Submit one time upon contract close-out.

**Submit TDP documents electronically. Two copies in printable format (.DWF, PDF, MS Word, MS Excel, etc.). Submit one time upon contract close-out.

Electronic copy delivery to Email as follows: SFAE-CSS-FP-E = donna.morgan@us.army.mil

17. PRICE GROUP:
18. ESTIMATED TOTAL PRICE:
G. PREPARED BY: Michael Herlevi H. DATE: 01 Oct 06
I. APPROVED BY: Donna Morgan J. DATE: 01 Oct 06

A. CONTRACT LINE ITEM NO.:
B. EXHIBIT: B
C. CATEGORY: CM
D. SYSTEM/ITEM: BRIDGE ERECTION BOAT
E. CONTRACT/PR NO.:
F. CONTRACTOR: FBM - BABCOCK

1. DATA ITEM NO. A005
2. TITLE OF DATA ITEM: Request for Deviation and Engineering Change Proposals
3. SUBTITLE:
4. AUTHORITY (Date of Acquisition Document No.) DI-CMAN-80639C
5. CONTRACT REFERENCE: Attachment 2, Para 4.2, 4.3, 4.4, 4.5
6. REQUIRING OFFICE: SFAE-CSS-FP-E
7. DD250 REQ: LT
8. APP CODE: LT
9. DIST. STATEMENT REQUIRED: A
10. FREQUENCY: SEE ITEM 16
11. AS OF DATE: SEE ITEM 16
12. DATE OF FIRST SUB: SEE ITEM 16
13. DATE OF SUBS. SUB: SEE ITEM 16

14. DISTRIBUTION	A. ADDRESSEES	B. COPIES	DRAFT	FINAL Reg	FINAL Repro
	SFAE-CSS-FP-E*		1	1	
15. TOTAL:			X	1	X

16. REMARKS:

4. MIL-HDBK-61A provides guidance for development and format of configuration changes documentation. Contractor format or forms from MIL-HDBK-61A are acceptable. Shall include as a minimum: a) Description of change, 2) Need for change, 3) Impact of change (cost, safety, transportability, function, performance, schedule), 4) Effectivity (date, boat serial number), 5) Method of applying change, 6) Notice of Revision (NOR) when drawings are revised.

12. Submission requirements start with approval of the Configuration Audit.

10, 11, 12, 13. Submit as required to describe changes to the technical data package and to document hardware deviations from the approved technical data package. Government will review and approve/disapprove within 10 working days.

*Electronic copy delivery to Email as follows: SFAE-CSS-FP-E = donna.morgan@us.army.mil

17. PRICE GROUP:
18. ESTIMATED TOTAL PRICE:
G. PREPARED BY: Michael Herlevi H. DATE: 01 Oct 06
I. APPROVED BY: Donna Morgan J. DATE: 01 Oct 06

A. CONTRACT LINE ITEM NO.:
B. EXHIBIT: B
C. CATEGORY: CM
D. SYSTEM/ITEM: BRIDGE ERECTION BOAT
E. CONTRACT/PR NO.:
F. CONTRACTOR: FBM - BABCOCK

1. DATA ITEM NO. A006
2. TITLE OF DATA ITEM: Boat Configuration Log
3. SUBTITLE:
4. AUTHORITY (Date of Acquisition Document No.) DI-CMAN-81516
5. CONTRACT REFERENCE: Attachment 2, Para 4.5.2
6. REQUIRING OFFICE: SFAE-CSS-FP-E
7. DD250 REQ: LT
8. APP CODE: LT
9. DIST. STATEMENT REQUIRED: A
10. FREQUENCY: SEE ITEM 16
11. AS OF DATE: SEE ITEM 16
12. DATE OF FIRST SUB: SEE ITEM 16
13. DATE OF SUBS. SUB: SEE ITEM 16
14. DISTRIBUTION

A. ADDRESSEES	B. COPIES	DRAFT	FINAL	
			Reg	Repro
SFAE-CSS-FP-E* (UPON REQUEST)		1	1	
15. TOTAL:		X	X	X

16. REMARKS:

4. Log to be in Contractors format, to include as a minimum: 1) BEB Serial Number, 2) Original (MK II) hull or identifying number, 3) Incoming inspection results, 4) Date BEB boat was completed, 5) Jet, Engine, Gear and warranted item serial numbers, 6) UID codes applied to boat and equipment, 7) Final inspection records, Contractor and Government, 8) Warranty start date, 9) Initial fielding date, location, unit, 10) Contractor applied kits, 11) ECP, waiver and deviation data

10. A separate log is required for each boat.

12. Initiate log at time hull is accepted into program for conversion into BEB boat.

*Contractor shall retain original file, electronic or hard copy. Duplicates shall be available to Government upon request. Electronic copy delivery to Email as follows: SFAE-CSS-FP-E = donna.morgan@us.army.mil

17. PRICE GROUP:
18. ESTIMATED TOTAL PRICE:
G. PREPARED BY: Michael Herlevi H. DATE: 01 Oct 06
I. APPROVED BY: Donna Morgan J. DATE: 01 Oct 06

A. CONTRACT LINE ITEM NO.:
B. EXHIBIT: B
C. CATEGORY: PACK
D. SYSTEM/ITEM: BRIDGE ERECTION BOAT
E. CONTRACT/PR NO.:
F. CONTRACTOR: FBM - BABCOCK

1. DATA ITEM NO. A007
2. TITLE OF DATA ITEM: Transportability Report
3. SUBTITLE:
4. AUTHORITY (Date of Acquisition Document No.) DI-PACK-80880B
5. CONTRACT REFERENCE: C.2.4
6. REQUIRING OFFICE: SFAE-CSS-FP-E
7. DD250 REQ: LT
8. APP CODE: LT
9. DIST. STATEMENT REQUIRED: A
10. FREQUENCY: ONE TIME
11. AS OF DATE:
12. DATE OF FIRST SUB: SEE BLK 16
13. DATE OF SUBS. SUB: SEE BLK 16
14. DISTRIBUTION

A. ADDRESSEES	B. COPIES DRAFT	FINAL Reg	FINAL Repro
MTMC-TEA*		1	
SFAE-CSS-FP-E**		1	
15. TOTAL:	X	2	X

16. REMARKS:

4. Use ID-PACK-80880C as a guide. May complete on-line using MTMCTEA web site. Report shall concentrate on differences between MK II and the remanufactured BEB.

12 Report is due 30 days after Critical Design Review (CDR).

*Original report, on-line or Contractor format.
**Electronic copy of original report. Further distribution within TACOM will be made by SFAE-CSS-FP-E.

Electronic copy delivery to Email as follows: SFAE-CSS-FP-E = donna.morgan@us.army.mil

17. PRICE GROUP:
18. ESTIMATED TOTAL PRICE:
G. PREPARED BY: Michael Herlevi H. DATE: 01 Oct 06
I. APPROVED BY: Donna Morgan J. DATE: 01 Oct 06

A. CONTRACT LINE ITEM NO.:
B. EXHIBIT: B
C. CATEGORY: PACKAGING
D. SYSTEM/ITEM: BRIDGE ERECTION BOAT
E. CONTRACT/PR NO.:
F. CONTRACTOR: FBM - BABCOCK

1. DATA ITEM NO. A008
2. TITLE OF DATA ITEM: Packaging Data
3. SUBTITLE:
4. AUTHORITY (Date of Acquisition Document No.)
5. CONTRACT REFERENCE: C.2.5 thru C.2.5.5
6. REQUIRING OFFICE: SFAE-CSS-FP-E
7. DD250 REQ: LT
8. APP CODE: LT
9. DIST. STATEMENT REQUIRED: A
10. FREQUENCY: SEE BLK 16
11. AS OF DATE: SEE BLK 16
12. DATE OF FIRST SUB: SEE BLK 16
13. DATE OF SUBS. SUB: SEE BLK 16

14. DISTRIBUTION	A. ADDRESSEES	B. COPIES	DRAFT	FINAL	
				Reg	Repro
	SFAE-CSS-FP-E			1	
15. TOTAL:			X	1	X

16. REMARKS:

4. Contractor format is acceptable.

10, 11, 12, and 13 Initially submitted with ILS Plan. Update as required at each provisioning conference.

Electronic copy delivery to Email as follows: SFAE-CSS-FP-E = donna.morgan@us.army.mil
Further distribution within TACOM will be made by SFAE-CSS-FP-E.

17. PRICE GROUP:
18. ESTIMATED TOTAL PRICE:
G. PREPARED BY: Michael Herlevi H. DATE: 01 Oct 06
I. APPROVED BY: Donna Morgan J. DATE: 01 Oct 06

A. CONTRACT LINE ITEM NO.:
B. EXHIBIT: B
C. CATEGORY: ILSS
D. SYSTEM/ITEM: BRIDGE ERECTION BOAT
E. CONTRACT/PR NO.:
F. CONTRACTOR: FBM - BABCOCK

1. DATA ITEM NO. A009
2. TITLE OF DATA ITEM: Oil Analysis
3. SUBTITLE:
4. AUTHORITY (Date of Acquisition Document No.) DI-MISC-80390
5. CONTRACT REFERENCE: C.4.1.3.2.4
6. REQUIRING OFFICE: SFAE-CSS-FP-E
7. DD250 REQ: LT
8. APP CODE: LT
9. DIST. STATEMENT REQUIRED: A
10. FREQUENCY: SEE BLK 16
11. AS OF DATE: SEE BLK 16
12. DATE OF FIRST SUB: SEE BLK 16
13. DATE OF SUBS. SUB: SEE BLK 16
14. DISTRIBUTION

A. ADDRESSEES	B. COPIES DRAFT	FINAL Reg	FINAL Repro
SFAE-CSS-FP-E		1	
15. TOTAL:	X	1	X

16. REMARKS:

Contractor shall initially submit with ILS Plan in C.4.1.1. Update as required.

Electronic copy delivery to Email as follows: SFAE-CSS-FP-E = donna.morgan@us.army.mil
Further distribution within TACOM will be made by SFAE-CSS-FP-E.

17. PRICE GROUP:
18. ESTIMATED TOTAL PRICE:
G. PREPARED BY: Michael Herlevi H. DATE: 01 Oct 06
I. APPROVED BY: Donna Morgan J. DATE: 01 Oct 06

A. CONTRACT LINE ITEM NO.:
B. EXHIBIT: B
C. CATEGORY: ILSS
D. SYSTEM/ITEM: BRIDGE ERECTION BOAT
E. CONTRACT/PR NO.:
F. CONTRACTOR: FBM - BABCOCK

1. DATA ITEM NO. A00A
2. TITLE OF DATA ITEM: Logistics Management Information (LMI) Data Summaries
3. SUBTITLE: LMI/PPL, EDPF and Pre-Provisioning Data
4. AUTHORITY (Date of Acquisition Document No.) MIL-PRF-45906, dated 11 Nov 96, DI-ILSS-81530; MIL STD 1388-2B
5. CONTRACT REFERENCE: C.4.3.5
6. REQUIRING OFFICE: AMSTA-LC-CHHP
7. DD250 REQ: LT
8. APP CODE: LT
9. DIST. STATEMENT REQUIRED: A
10. FREQUENCY: AS REQUIRED
11. AS OF DATE: SEE BLK 16
12. DATE OF FIRST SUB: SEE BLK 16
13. DATE OF SUBS. SUB: SEE BLK 16

14. DISTRIBUTION	A. ADDRESSEES	B. COPIES	DRAFT	FINAL	
				Reg	Repro
	AMSTA-LC-CHHP*		1	2	1
	AMSTA-LC-CHHP***				2
15. TOTAL:			1	2	3

16. REMARKS:

*Draft LMI/PPL, EDFP and LMIS/Pre-Procurement Screening data in paper (hard copy) format, deliver at each Provisioning Conference/IPR. CD-R with EDFP in PLISN sequence, 30 days after each conference/IPR.

**PPL/LSA 036 in MIL STD 1388-2B format via Email.
Electronic copy delivery to Email as follows: randy.derewonko@us.army.mil and Pete.phillips@us.army.mil

***Final LMI/PPL, EDFP, CD-R format, 30 days after final clean-up conference, 2 copies. If rejected, resubmit within 30 days incorporating Government comments.

Pre-provisioning data will have Actual Vendor or mfg. CAGE, PN, PLISN on each EDFP. Submittal will be in English, have data sufficient for cataloging with relationship to next higher assembly identified. EDFP will be delivered for each item without an NSN.

17. PRICE GROUP:
18. ESTIMATED TOTAL PRICE:
G. PREPARED BY: Michael Herlevi H. DATE: 01 Oct 06
I. APPROVED BY: Donna Morgan J. DATE: 01 Oct 06

A. CONTRACT LINE ITEM NO.:
B. EXHIBIT: B
C. CATEGORY: ILSS
D. SYSTEM/ITEM: BRIDGE ERECTION BOAT
E. CONTRACT/PR NO.:
F. CONTRACTOR: FBM - BABCOCK

1. DATA ITEM NO. A00B
2. TITLE OF DATA ITEM: Technical Manuals
3. SUBTITLE: PDEP, DEP, FDEP
4. AUTHORITY (Date of Acquisition Document No.) MIL STD 40051B and MIL STD 1222B
5. CONTRACT REFERENCE: C.4.6
6. REQUIRING OFFICE: AMSTA-LC-CHHP
7. DD250 REQ:
8. APP CODE:
9. DIST. STATEMENT REQUIRED:
10. FREQUENCY:
11. AS OF DATE:
12. DATE OF FIRST SUB:
13. DATE OF SUBS. SUB:
14. DISTRIBUTION

A. ADDRESSEES	B. COPIES	DRAFT	FINAL	
			Reg	Repro
AMSTA-LC-CHHP		2	2	2
SFAE-CSS-FP-E				1
PDEP		5	5	
Training Site Designated DEP #1		10	10	
LD/VV Site DEP #2		10	10	
FDEP		5	5	
15. TOTAL:		32	32	3

16. REMARKS:
Contractor validated Preliminary Draft Equipment Publications due 240 DAC. Validation record/report subject to Government review.

The First Contractor validated Draft Equipment Publication(s) DEP 1) submittal is due on 330 DAC to support Training Course #1. Training Course #1 will begin Mar 2005. Contractor shall have 30 working days to incorporate all changes/comments and re-submit for review. The second Contractor-validated DEP 2 submittal is due on 390 DAC to support Logistics Demonstration (LD) and Validation/Verification (VV). The DEP(s) shall be subject to Government review as deemed appropriate.

Final Draft Equipment Publication (FDEP) shall be submitted 570 DAC with comments/changes from all log and test events, engineering changes and suggestions incorporated.

Deliver a Final Reproducible Copy (600DPI laser print or equivalent) of each complete publication, with running sheets and folio markings, sized 1 to 1 reproduction.

REPO=Electronic (CD-RW) delivery with CD(s) containing one .PDF file or complete manual, also graphics, and world processing files.

Electronic copy delivery to Email as follows: SFAE-CSS-FP-E = donna.morgan@us.army.mil and AMSTA-LC-CHHP = ??.derewonko@us.army.mil

17. PRICE GROUP:
18. ESTIMATED TOTAL PRICE:
G. PREPARED BY: Michael Herlevi
H. DATE: 01 Oct 06
I. APPROVED BY: Donna Morgan J. DATE: 01 Oct 06

A. CONTRACT LINE ITEM NO.:
B. EXHIBIT: B
C. CATEGORY: ILSS
D. SYSTEM/ITEM: BRIDGE ERECTION BOAT
E. CONTRACT/PR NO.:
F. CONTRACTOR: FBM - BABCOCK

1. DATA ITEM NO. A00C
2. TITLE OF DATA ITEM: Battle Damage Assessment Repair (BDAR)
3. SUBTITLE:
4. AUTHORITY (Date of Acquisition Document No.) MIL-PRF-63003-B and Amendment 1
5. CONTRACT REFERENCE: C.4.6.6
6. REQUIRING OFFICE: SFAE-CSS-FP-E
7. DD250 REQ: LT
8. APP CODE: LT
9. DIST. STATEMENT REQUIRED: A
10. FREQUENCY: SEE BLK 16
11. AS OF DATE: SEE BLK 16
12. DATE OF FIRST SUB: SEE BLK 16
13. DATE OF SUBS. SUB: SEE BLK 16

14. DISTRIBUTION	A. ADDRESSEES	B. COPIES DRAFT	FINAL Reg	FINAL Repro
	SFAE-CSS-FP-E		1	
15. TOTAL:		X	1	X

16. REMARKS:

Contractor shall initially submit within 90 days after option exercise. Update as required.

Electronic copy delivery to Email as follows: SFAE-CSS-FP-E = donna.morgan@us.army.mil

17. PRICE GROUP:
18. ESTIMATED TOTAL PRICE:
G. PREPARED BY: Michael Herlevi H. DATE: 01 Oct 06
I. APPROVED BY: Donna Morgan J. DATE: 01 Oct 06

A. CONTRACT LINE ITEM NO.:
B. EXHIBIT: B
C. CATEGORY: ILSS
D. SYSTEM/ITEM: BRIDGE ERECTION BOAT
E. CONTRACT/PR NO.:
F. CONTRACTOR: FBM - BABCOCK

1. DATA ITEM NO. A00D
2. TITLE OF DATA ITEM: System Support Package List (SSP)
3. SUBTITLE:
4. AUTHORITY (Date of Acquisition Document No.)
5. CONTRACT REFERENCE: C.4.8.1.1
6. REQUIRING OFFICE: SFAE-CSS-FP-E
7. DD250 REQ: LT
8. APP CODE: LT
9. DIST. STATEMENT REQUIRED: A
10. FREQUENCY: SEE BLK 16
11. AS OF DATE: SEE BLK 16
12. DATE OF FIRST SUB: SEE BLK 16
13. DATE OF SUBS. SUB: SEE BLK 16

14. DISTRIBUTION	A. ADDRESSEES	B. COPIES	DRAFT	FINAL	
				Reg	Repro
	SFAE-CSS-FP-E			1	
15. TOTAL:			X	1	X

16. REMARKS:

Contractor shall initially submit within 90 days after contract award. Update as required.

Electronic copy delivery to Email as follows: SFAE-CSS-FP-E = donna.morgan@us.army.mil
Further distribution within TACOM will be made by SFAE-CSS-FP-E.

17. PRICE GROUP:
18. ESTIMATED TOTAL PRICE:
G. PREPARED BY: Michael Herlevi H. DATE: 01 Oct 06
I. APPROVED BY: Donna Morgan J. DATE: 01 Oct 06

A. CONTRACT LINE ITEM NO.:
B. EXHIBIT: B
C. CATEGORY: SAFT
D. SYSTEM/ITEM: BRIDGE ERECTION BOAT
E. CONTRACT/PR NO.:
F. CONTRACTOR: FBM - BABCOCK

1. DATA ITEM NO. A00E
2. TITLE OF DATA ITEM: Safety Assessment Report
3. SUBTITLE:
4. AUTHORITY (Date of Acquisition Document No.) DI-SAFT-80102B
5. CONTRACT REFERENCE: C.4.9.6.2, C.4.9.7, C.4.9.8
6. REQUIRING OFFICE: SFAE-CSS-FP-E
7. DD250 REQ: LT
8. APP CODE: LT
9. DIST. STATEMENT REQUIRED: A
10. FREQUENCY: SEE BLK 16
11. AS OF DATE: SEE BLK 16
12. DATE OF FIRST SUB: SEE BLK 16
13. DATE OF SUBS. SUB: SEE BLK 16

14. DISTRIBUTION	A. ADDRESSEES	B. COPIES	DRAFT	FINAL	
				Reg	Repro
	SFAE-CSS-FP-E*			2**	
15. TOTAL:			X	2	X

16. REMARKS:

4. In Contractors format. To include risk identification and assessments per MIL-STD-882. Report to include Safety, Human Factors and Survivability.

10, 11, 12, and 13. Initial report is due 30 days after Preliminary Design Review (PDR), final report is due 30 days after completion of Shakedown Test. Update as required.

*Electronic copy delivery to Email as follows: SFAE-CSS-FP-E = donna.morgan@us.army.mil
Further distribution within TACOM will be made by SFAE-CSS-FP-E.

** One (1) initial report and one (1) final report.

17. PRICE GROUP:
18. ESTIMATED TOTAL PRICE:
G. PREPARED BY: Michael Herlevi H. DATE: 01 Oct 06
I. APPROVED BY: Donna Morgan J. DATE: 01 Oct 06

A. CONTRACT LINE ITEM NO.:
B. EXHIBIT: B
C. CATEGORY: ILSS
D. SYSTEM/ITEM: BRIDGE ERECTION BOAT
E. CONTRACT/PR NO.:
F. CONTRACTOR: FBM - BABCOCK
1. DATA ITEM NO. A00F
2. TITLE OF DATA ITEM: Training Materials
3. SUBTITLE: Instructor-Based Training
4. AUTHORITY (Date of Acquisition Document No.) SEE ITEM 16
5. CONTRACT REFERENCE: C.4.10.2.2, C.4.10.5
6. REQUIRING OFFICE: AMSTA-LC-CIFS
7. DD250 REQ: LT
8. APP CODE: LT
9. DIST. STATEMENT REQUIRED: A
10. FREQUENCY: SEE BLK 16
11. AS OF DATE: SEE BLK 16
12. DATE OF FIRST SUB: SEE BLK 16
13. DATE OF SUBS. SUB: SEE BLK 16

14. DISTRIBUTION	A. ADDRESSEES	B. COPIES	DRAFT	FINAL	
				Reg	Repro
	AMSTA-LC-CIFS*		2		
	AMSTA-LC-CIFS**		20		
	AMSTA-LC-CIFS***		12 + 12		
	AMSTA-LC-CIFS****		2		
	AMSTA-LC-CIFS*****		2		2
	SFAE-CSS-FP-E*****				1
	AMSTA-LC-CIFS******			AR	
15. TOTAL:			50	AR	3

16. REMARKS:
4. Operator and Maintainer course materials with content and formats as described in the SOW. Developed in accordance with the approved Training Plan.
10, 11, 12, 13. Revisions subsequent to NET are a contract option.
Materials for review shall be in electronic format (CD-ROM). Materials for courses shall be per block 14. Finals materials shall be in hard copy and electronic format. Electronic copy delivery to Email as follows: AMSTA-LC-CIFS = ??@us.army.mil and SFAE-CSS-FP-E = donna.morgan@us.army.mil.
*Submit 1st draft 60 days prior to start of shakedown Test, two copies of each course (Operator and Maintainer). The Government will review and provide comments. Update within 30 days of receiving comments.
**Perform Training Course One with 2nd draft materials, twenty (20) copies of each course (Operator and Maintainer) hard copy format.
***Incorporate comments from Training Course One and submit within 30 days for Government review and comment. Update within 60 days of receiving comments.
****Conduct I&KPT using 3rd draft materials, twelve (12) copies of each course (Operator and Maintainer). Each attendee also receives an electronic (CD) copy.
*****Incorporate comments form I&KPT training and submit within 30 days for Government review and comment. Update within 60 days of receiving comments. Submit the final, approved course material. Two electronic copies of each course (Operator and Maintainer).
******Conduct courses with final materials as each course is called up. One set of NET training is required. Additional courses are optional. Materials are delivered in multiples of 14 for Operator and 12 for Maintainer courses.
17. PRICE GROUP:
18. ESTIMATED TOTAL PRICE:
G. PREPARED BY: Michael Herlevi H. DATE: 01 Oct 06
I. APPROVED BY: Donna Morgan J. DATE: 01 Oct 06

A. CONTRACT LINE ITEM NO.:
B. EXHIBIT: B
C. CATEGORY: ILSS
D. SYSTEM/ITEM: BRIDGE ERECTION BOAT
E. CONTRACT/PR NO.:
F. CONTRACTOR: FBM - BABCOCK

1. DATA ITEM NO. A00G
2. TITLE OF DATA ITEM: Training Materials
3. SUBTITLE: Distance Learning (CBIT)
4. AUTHORITY (Date of Acquisition Document No.) SEE BLK 16
5. CONTRACT REFERENCE: C.4.10.3.6
6. REQUIRING OFFICE: AMSTA-LC-CIFS
7. DD250 REQ: LT
8. APP CODE: LT
9. DIST. STATEMENT REQUIRED: A
10. FREQUENCY: SEE BLK 16
11. AS OF DATE: SEE BLK 16
12. DATE OF FIRST SUB: SEE BLK 16
13. DATE OF SUBS. SUB: SEE BLK 16

14. DISTRIBUTION	A. ADDRESSEES	B. COPIES	DRAFT	FINAL	
				Reg	Repro
	AMSTA-LC-CIFS*			1	
	AMSTA-LC-CIFS**		2		
	AMSTA-LC-CIFS***		2		
	AMSTA-LC-CIFS****				2
15. TOTAL:			4	1	2

16. REMARKS:

4. Format and content per C.4.10.3

10, 11, 12, 13
*Revised the Training Plan to incorporate Distance Learning course development 30 days after exercise of option.
**Submit draft training materials, in electronic format, 90 days after approval of revised Training Plan. Government will review and provide comments.
***Submit revised draft training materials, in electronic format, 60 days after receipt of Government comments. Government will review and provide comments.
****Submit final Training Materials in electronic format 60 days after receipt of Government comments.

Electronic copy delivery to Email as follows: AMSTA-LC-CIFS = alford.frazier@us.army.mil
Further distribution within TACOM will be made by AMSTA-LC-CIFS.

17. PRICE GROUP:
18. ESTIMATED TOTAL PRICE:
G. PREPARED BY: Michael Herlevi H. DATE: 01 Oct 06
I. APPROVED BY: Donna Morgan J. DATE: 01 Oct 06

A. CONTRACT LINE ITEM NO.:
B. EXHIBIT: B
C. CATEGORY: ILSS
D. SYSTEM/ITEM: BRIDGE ERECTION BOAT
E. CONTRACT/PR NO.:
F. CONTRACTOR: FBM - BABCOCK

1. DATA ITEM NO. A00H
2. TITLE OF DATA ITEM: Analyses
3. SUBTITLE:
4. AUTHORITY (Date of Acquisition Document No.) DI-RELI-81315
5. CONTRACT REFERENCE: C.5.2
6. REQUIRING OFFICE: SFAE-CSS-FP-E
7. DD250 REQ: LT
8. APP CODE: LT
9. DIST. STATEMENT REQUIRED: A
10. FREQUENCY: SEE BLK 16
11. AS OF DATE: SEE BLK 16
12. DATE OF FIRST SUB: SEE BLK 16
13. DATE OF SUBS. SUB: SEE BLK 16

14. DISTRIBUTION	A. ADDRESSEES	B. COPIES	DRAFT	FINAL	
				Reg	Repro
	SFAE-CSS-FP-E			1	
15. TOTAL:			X	1	X

16. REMARKS:

Contractor format is acceptable. Contractor shall initially submit PDR. Update as required.

Electronic copy delivery to Email as follows: SFAE-CSS-FP-E = donna.morgan@us.army.mil
Further distribution within TACOM will be made by SFAE-CSS-FP-E.

17. PRICE GROUP:
18. ESTIMATED TOTAL PRICE:
G. PREPARED BY: Michael Herlevi H. DATE: 01 Oct 06
I. APPROVED BY: Donna Morgan J. DATE: 01 Oct 06

A. CONTRACT LINE ITEM NO.:
B. EXHIBIT: B
C. CATEGORY: ILSS
D. SYSTEM/ITEM: BRIDGE ERECTION BOAT
E. CONTRACT/PR NO.:
F. CONTRACTOR: FBM - BABCOCK

1. DATA ITEM NO. A00J
2. TITLE OF DATA ITEM: Test Plans
3. SUBTITLE:
4. AUTHORITY (Date of Acquisition Document No.) DI-QCIC-80553
5. CONTRACT REFERENCE: C.5.3
6. REQUIRING OFFICE: SFAE-CSS-FP-E
7. DD250 REQ: LT
8. APP CODE: LT
9. DIST. STATEMENT REQUIRED: A
10. FREQUENCY: SEE BLK 16
11. AS OF DATE: SEE BLK 16
12. DATE OF FIRST SUB: SEE BLK 16
13. DATE OF SUBS. SUB: SEE BLK 16

14. DISTRIBUTION	A. ADDRESSEES	B. COPIES	DRAFT	FINAL	
				Reg	Repro
	SFAE-CSS-FP-E*			1	
15. TOTAL:			X	1	X

16. REMARKS:

Contractor format is acceptable. Contractor shall initially submit at the CDR. Update as required.

Electronic copy delivery to Email as follows: SFAE-CSS-FP-E = donna.morgan@us.army.mil
Further distribution within TACOM will be made by SFAE-CSS-FP-E.

17. PRICE GROUP:
18. ESTIMATED TOTAL PRICE:
G. PREPARED BY: Michael Herlevi H. DATE: 01 Oct 06
I. APPROVED BY: Donna Morgan J. DATE: 01 Oct 06

A. CONTRACT LINE ITEM NO.:
B. EXHIBIT: B
C. CATEGORY: PACK
D. SYSTEM/ITEM: BRIDGE ERECTION BOAT
E. CONTRACT/PR NO.:
F. CONTRACTOR: FBM - BABCOCK

1. DATA ITEM NO. A00K
2. TITLE OF DATA ITEM: Final Inspection Record
3. SUBTITLE: FIR
4. AUTHORITY (Date of Acquisition Document No.) D1-QCIC-81068
5. CONTRACT REFERENCE: C.6.3
6. REQUIRING OFFICE: AMSRD-TAR-E/BRDG
7. DD250 REQ: LT
8. APP CODE: LT
9. DIST. STATEMENT REQUIRED: A
10. FREQUENCY: AS REQ
11. AS OF DATE:
12. DATE OF FIRST SUB: SEE BLK 16
13. DATE OF SUBS. SUB: SEE BLK 16

14. DISTRIBUTION	A. ADDRESSEES	B. COPIES	DRAFT	FINAL	
				Reg	Repro
	AMSRD-TAR-E/BRDG		1		1
15. TOTAL:			1		1

16. REMARKS:

Develop in Contractor format.

Draft FIR to be submitted to the Government for review 60 days calendar days prior to submission of the first production boat. Final submission is due 30 calendar days after Government review. Government will review all submissions with in 7 calendar days.

A FIR shall be submitted with each boat produced.

Electronic copy delivery to Email as follows: AMSRD-TAR-E/BRDG = mark.cicero1@us.army.mil

17. PRICE GROUP:
18. ESTIMATED TOTAL PRICE:
G. PREPARED BY: Michael Herlevi H. DATE: 01 Oct 06
I. APPROVED BY: Donna Morgan J. DATE: 01 Oct 06

A. CONTRACT LINE ITEM NO.:
B. EXHIBIT: B
C. CATEGORY:
D. SYSTEM/ITEM: BRIDGE ERECTION BOAT
E. CONTRACT/PR NO.:
F. CONTRACTOR: FBM - BABCOCK

1. DATA ITEM NO. A00L
2. TITLE OF DATA ITEM: Product Quality Deficiency Report (PQDR)
3. SUBTITLE: PQDR Response
4. AUTHORITY (Date of Acquisition Document No.) DI-MGMT-80596
5. CONTRACT REFERENCE: C.6.13
6. REQUIRING OFFICE: AMSRD-TAR-E/BRDG
7. DD250 REQ: LT
8. APP CODE: LT
9. DIST. STATEMENT REQUIRED: A
10. FREQUENCY: SEE BLK 16
11. AS OF DATE: SEE BLK 16
12. DATE OF FIRST SUB: SEE BLK 16
13. DATE OF SUBS. SUB: SEE BLK 16

14. DISTRIBUTION	A. ADDRESSEES	B. COPIES	DRAFT	FINAL	
				Reg	Repro
	AMSRD-TAR-E/BRDG			1	
15. TOTAL:			X	1	X

16. REMARKS:

Contractor shall submit PQDRs on all deficient GFM provided.

*Electronic copy delivery to Email as follows: AMSRD-TAR-E/BRDG = mark.cicero1@us.army.mil
Further distribution within TACOM will be made by AMSRD-TAR-E/BRDG.

17. PRICE GROUP:
18. ESTIMATED TOTAL PRICE:
G. PREPARED BY: Michael Herlevi H. DATE: 01 Oct 06
I. APPROVED BY: Donna Morgan J. DATE: 01 Oct 06

A. CONTRACT LINE ITEM NO.:
B. EXHIBIT: B
C. CATEGORY:
D. SYSTEM/ITEM: BRIDGE ERECTION BOAT
E. CONTRACT/PR NO.:
F. CONTRACTOR: FBM - BABCOCK

1. DATA ITEM NO. A00M
2. TITLE OF DATA ITEM: Failure Analysis and Corrective Action Report
3. SUBTITLE: QDR Response
4. AUTHORITY (Date of Acquisition Document No.) DI-RELI-81315
5. CONTRACT REFERENCE: C.6.16
6. REQUIRING OFFICE: AMSRD-TAR-E/BRDG
7. DD250 REQ: LT
8. APP CODE: LT
9. DIST. STATEMENT REQUIRED: A
10. FREQUENCY: SEE BLK 16
11. AS OF DATE: SEE BLK 16
12. DATE OF FIRST SUB: SEE BLK 16
13. DATE OF SUBS. SUB: SEE BLK 16

14. DISTRIBUTION	A. ADDRESSEES	B. COPIES	DRAFT	FINAL	
				Reg	Repro
	AMSRD-TAR-E/BRDG			1	
15. TOTAL:			X	1	X

16. REMARKS:

Contractor shall respond to all QDRs. Responses to be in Contractors format it includes the information required in paragraph C.16 of the SOW and referenced DID.

Submit responses to all QDRs IAW this schedule: CATEGORY 1: 48 hours; CATEGORY 2: 30 days.

Submissions shall be in electronic format. Electronic copy delivery to Email as follows: Cover Letter to AMSRD-TAR-E/BRDG = christopher.turner2@us.army.mil. Reports to AMSRD-TAR-E/BRDG = mark.cicero1@us.army.mil. Further distribution within TACOM will be made by AMSRD-TAR-E/BRDG.

17. PRICE GROUP:
18. ESTIMATED TOTAL PRICE:
G. PREPARED BY: Michael Herlevi H. DATE: 01 Oct 06
I. APPROVED BY: Donna Morgan J. DATE: 01 Oct 06

A. CONTRACT LINE ITEM NO.:
B. EXHIBIT: B
C. CATEGORY:
D. SYSTEM/ITEM: BRIDGE ERECTION BOAT
E. CONTRACT/PR NO.:
F. CONTRACTOR: FBM - BABCOCK

1. DATA ITEM NO. A00N
2. TITLE OF DATA ITEM: Integrated Master Schedule
3. SUBTITLE: Risk Element Monitoring
4. AUTHORITY (Date of Acquisition Document No.): DI-MGMT-81650
5. CONTRACT REFERENCE: C.1.3.6
6. REQUIRING OFFICE: SFAE-CSS-FP-E
7. DD250 REQ: LT
8. APP CODE: LT
9. DIST. STATEMENT REQUIRED:
10. FREQUENCY: ONE TIME
11. AS OF DATE: SEE BLK 16
12. DATE OF FIRST SUB: SEE BLK 16
13. DATE OF SUBS. SUB: SEE BLK 16
14. DISTRIBUTION

A. ADDRESSEES	B. COPIES DRAFT	FINAL Reg	FINAL Repro
SFAE-CSS-FP-E*	1		
SFAE-CSS-FP-E**		AR	

15. TOTAL: X AR

16. REMARKS:

4. Contractors format list of contract work elements that can be tracked to assess overall work status. Based upon SOW, WBS, MIPS and CDRL work elements. Shall include element identification, point of contact for each element and recommended sampling interval.

10, 11, 12, and 13. *List is due 30 days after Start of Work meeting. Government will review and revise list within 10 days. Government reply will include schedule for report.

**Submit report in Contractors format, approximately monthly. Report shall include all elements selected for tracking by Government, the planned completion status of each element and the actual completion status of each element.

Electronic copy delivery to Email as follows: SFAE-CSS-FP-E = donna.morgan@us.army.mil. Further distribution within TACOM will be made by SFAE-CSS-FP-E

17. PRICE GROUP:
18. ESTIMATED TOTAL PRICE:
G. PREPARED BY: Michael Herlevi H. DATE: 01 Oct 06
I. APPROVED BY: Donna Morgan J. DATE: 01 Oct 06

A. CONTRACT LINE ITEM NO.:
B. EXHIBIT: B
C. CATEGORY: MGMT
D. SYSTEM/ITEM: BRIDGE ERECTION BOAT
E. CONTRACT/PR NO.:
F. CONTRACTOR: FBM - BABCOCK

1. DATA ITEM NO. A00P
2. TITLE OF DATA ITEM: Condition Found Report
3. SUBTITLE: Emergent Work Survey Report
4. AUTHORITY (Date of Acquisition Document No.) DI-MGMT-81648
5. CONTRACT REFERENCE: C.2.6.1
6. REQUIRING OFFICE: SFAE-CSS-FP-E
7. DD250 REQ:
8. APP CODE:
9. DIST. STATEMENT REQUIRED:
10. FREQUENCY: AS REQD
11. AS OF DATE:
12. DATE OF FIRST SUB: SEE BLK 16
13. DATE OF SUBS. SUB: SEE BLK 16
14. DISTRIBUTION

A. ADDRESSEES	B. COPIES DRAFT	FINAL Reg	FINAL Repro
SFAE-CSS-FP-E*		1	
15. TOTAL:	X	1	X

16. REMARKS:

4. Use DI-MGMT-81648 as a guide. Report shall identify work necessary to restore MK I or MK II hull and appurtenances, mast and cab to conditions ready to receive the MK II-S modification and to restore seaworthiness and interfaces per ATPD 2317, 3 Mar 04, paragraphs 3.2.1, 3.2.1.1 and 3.2.1.2, 3.2.1.3 and 3.2.1.4. To include digital photographs and sketches as necessary; Multiple hulls may be included in one report.

Tailoring: Requirement 3.f.: recommendation to replace or repair and type of repair to be based upon cost. Delete requirement 3.2.a. Requirement 3.2.c.: include date Government approval is required if schedule impact is to be avoided.

12. Report is due no later than 10 working days after survey is performed.

*Electronic copy delivery to Email as follows: SFAE-CSS-FP-E = donna.morgan@us.army.mil.
Further distribution within TACOM will be made by SFAE-CSS-FP-E. Report in Contractor format, with submission in MS Office product or .PDF format.

17. PRICE GROUP:
18. ESTIMATED TOTAL PRICE:
G. PREPARED BY: Michael Herlevi H. DATE: 01 Oct 06
I. APPROVED BY: Donna Morgan J. DATE: 01 Oct 06

Exhibit C

DATA ITEM DESCRIPTION
Title: CONDITION FOUND REPORT

Number: DI-MGMT-81648
AMSC Number: N7531
DTIC Applicable: N/A
Office of Primary Responsibility: N PEO SHIPS-FL32
Approval Date:20040809,Updated 20060412
Limitation: N/A
GIDEP Applicable: N/A
Applicable Forms: N/A

Use/Relationship: The Condition Found Report identifies needed repairs and recommends corrective action for work discovered during the contract performance period which are not covered by the work specifications.

This DID contains the format, content, and intended use information for the data product resulting from the work task described in the contract.

Requirements:

1. Reference documents. N/A.

2. Format. The report shall be in Contractors format.

3. Content. The report shall be serialized by CFR Number, and shall include the following:

a. Contract number, ship and hull number
b. Work Item Number to which the CFR relates
c. Date work requirement was discovered
d. Clear description of the work requirement
e. Specific location of the work requirement
f. Recommendation for corrective action

3.1 Recommendation for appropriate/best time to accomplish (i.e. during current availability with or without schedule change, future CNO or Continuous Maintenance Availability), and supporting rationale for the recommendation (such as cost efficiencies, availability of work force, availability of material, premium expenditures, etc.).

3.2 Cost and time estimates and the time frame for which it is valid, including:

DELETE a. Class "C" cost estimates. For work requirements which could be estimated within five working days, a class "F" estimate (+/- 40%) identifying any potential impact which may affect the current schedule shall be included. The Class "F" estimate shall also contain the date on which a class "C" estimate will be provided. DELETE

b. Estimated Premium/Acceleration Costs, including premium costs for; material, sub-contractors, man-hours, rework and any additional costs to on going work resulting from inclusion of the CFR work requirement.

c. Identification of related changes, if any, to the internal milestones and production and contract completion dates shall be included. When no changes were required a statement to that fact shall also be included.

4. Media. The electronic media requirements shall be as specified in the contract on the DD 1423 CDRL.

5. End of DI-MGMT-81648.

ATTACHMENT 001

ATPD 2317 dated 3 March 2004; Revised 5 April 2004.

PERFORMANCE BASED PURCHASE DESCRIPTION
BRIDGE ERECTION BOAT

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PERFORMANCE-BASED PURCHASE DESCRIPTION
Bridge Erection Boat

1. SCOPE

1.1. Abstract. This purchase description establishes the configuration, performance, interface and test requirements for the Bridge Erection Boat (BEB). Government furnished U.S. Combat Support Boats (USCSB) Mk II (Mk II BEB) shall be remanufactured to the standards described in this purchase description.

1.2. General Concept. The BEB will consist of an MkII BEB with these alterations:

1.2.1 The existing propulsion jet is replaced by a modern propulsion jet.

1.2.2 The existing engine and controls are replaced by items based upon the Cummins 210 kit, p/n CPS-210-BEB.

1.2.3 A new transmission and shaft that match the engine to jet are used.

1.2.4 Other components, systems and assemblies are retained in the BEB configuration. These items are reused or replaced with the exact item when continued supply of the item is assured.

1.2.5 When Mk II components, systems and assemblies are no longer supportable or available, they are replaced by functionally equivalent new items.

1.2.6 Structures and coatings are restored to the minimal extent that will ensure safe operation.

2. APPLICABLE DOCUMENTS

2.1 General. Document users are cautioned that they must comply with the specified requirements and documents cited in the body of this specification, whether or not they are listed in this section. The following specifications, standards, and handbooks form a part of this document to the extent specified herein. Unless otherwise specified, the issues of these documents are those listed in the issue of the Department of Defense Index of Specifications and Standards (DoDISS) and supplement thereto, in effect on the date of contract award.

2.2. Government Documents

2.2.1. Specifications

MILITARY

MIL-DTL-53072 Chemical Agent Resistant Coating (CARC) System Application Procedures and Quality Control Inspection

MIL-DTL-53039C	Coating, Aliphatic Polyurethane, Single Component, Chemical Agent Resistant
MIL-DTL-64159	Detail Specification, Coating, Water Dispersible, Aliphatic Polyurethane, Chemical Agent Resistant
MIL-STD-1472F	Department of Defense Design Criteria Standard, Human Engineering

The above documents are available on request from the contracting office.

2.2.2. Standards

FEDERAL

FED-STD-595 Colors Used in Government Procurement

MILITARY

MIL-STD-1366 Transportability Criteria
MIL-STD-130L Identification of U.S. Equipment

The above standards are available from the Standardization Documents Order Desk, 700 Robbins Avenue, Building 4D, Philadelphia, PA 19111-5094 and http://assist1.daps.dla.mil/quicksearch/.

2.2.3. Other Government Documents, Drawings, and Publications.

Drawing	97403 13226E0449	MK2 CSB Hull Structure
Drawing	97403 13226E0450	MK2 CSB Assembly
Drawing	97403 13226E0582	Cab Assembly

Instruction M16672.2D Commandant Instruction, Navigation Rules, International - Inland

The above documents are available on request from the contracting office.

2.3. Non-Government Publications.

AMERICAN WELDING SOCIETY, INC. (AWS)

AWS D1.2/D1.2M:2003 - Structural Welding Code Aluminum

Copies can be obtained from the American Welding Society, Inc., 550 Lejeune Road, Miami, FL 33126.

AMERICAN SOCIETY FOR TESTING MATERIALS

ASTM D3359-02 Standard Test Methods for Measuring Adhesion by Tape Test

Copies can be obtained from ASTM International, 100 Barr Harbor Drive, PO Box C700, West Conshohocken, PA 19428-2959

SOCIETY OF AUTOMOTIVE ENGINEERS (SAE)

SAE J98 Personnel Protection for General Purpose Industrial Machines (1 November 1992)

Copies can be obtained from the Society of Automotive Engineers, 400 Commonwealth Drive, Warrendale, PA 15096.

2.4. Order of Precedence. The order of precedence for requirements in this purchase description shall be:

1. U.S. Laws and Regulations
2. This document
3. Specifications, standards and guides referenced by this document

3. REQUIREMENTS.

3.1. Description. The BEB is an aluminum-hulled, twin-diesel, twin-jet workboat that supports Multi-Role Bridge Company (MRBC)

operations. Two BEBs can safely propel and maneuver a seven-bay raft carrying a Military Load Class 80 Tracked (MLC80(T)) or MLC 96 Wheeled (MLC96(W)) load. At a quantity of one boat per three bays, the BEB provides the thrust to temporarily anchor a bridge against river currents. The BEB retains the interface capabilities of the MkII and is transportable by the same equipment and methods as the Mk II BEB. The BEB is assigned to and is operated and maintained by the personnel of the MRBC. The BEB meets the requirements herein with all kits applied.

3.2. Physical Characteristics.

3.2.1. Hull. The BEB shall utilize the hull from a Mk II BEB. The general configuration and structure of the MkII BEB, as depicted by drawing 97403-13226E0449, shall be retained.

3.2.1.1. Structural Alterations. The watertight integrity of the MkII hull shall be restored during the BEB manufacturing process. Unused penetrations in the watertight and weathertight envelope shall be permanently sealed by welding. Changes to the hull structure and attachments shall be limited to those necessary to accept the specified propulsion system and kits. Structural damage (bends, dents, scrapes, cracks, buckles and penetrations) shall be repaired only to the degree necessary to allow the installation of new components and to ensure safety. Alterations shall be designed to the same standards as the original MkII hull. Welding shall conform to the requirements of AWS D1.2/D1.2M:2003.

3.2.1.2. Interface Dimensions. The interfaces of the Mk II BEB with the Common Bridge Transport (CBT), Improved Float Bridge (IFB also known as Standard Ribbon Bridge (SRB)), Improved Ribbon Bridge (IRB), Improved Boat Cradle (IBC) and M1076 Trailer (PLST) shall not be altered.

3.2.1.3. Buoyancy and Stability. Intact stability of the MkII BEB shall be retained as practicable in the BEB. Cruffles (flotation balls) shall be reused and their stowage compartments sealed. The rigid foam blocks of the MKII BEB shall be retained as practicable. Scupper check valves (squash balls) shall be replaced. If practicable the BEB, at minimum operating condition, shall remain afloat if holed and free-flooded in calm water.

3.2.1.4. Compartmentation. The BEB shall retain the compartments, enclosures and framing of the Mk II except as necessary to accommodate the specified propulsion system and kits.

3.2.1.5. Grounding Protection. The area of the hull bow that contacts the ground during loading, unloading, launching, operations and recovery shall be fitted with a replaceable wear surface.

3.2.1.6. Keel Cooler Protection. Covers or gratings to protect that keel coolers against grounding and rocks shall be provided. The protective covers or gratings shall be removable with common hand tools. The covers shall not extend below the hull more than 3 inches, shall not affect the interface between the boat and the cradle, and shall allow adequate cooling water flow.

3.2.1.7 Engine Hatch Modification. A means shall be provided or identified to allow personnel to safely cross the engine compartment when the hatches are open. The reinforcing channel on the starboard engine hatch may be modified to serve this function. The provisions or procedures shall be operable without tools.

3.2.1.8. Anodes. The necessity for additional sacrificial anodes shall be investigated. Anodes shall be added or altered as required by the change in propulsion machinery.

3.2.1.9. Operators Station. The MkII shall retain the general controls and operators configuration of the MkII BEB. New controls and displays shall be located as nearly as practicable in the locations of items they replace or supplant.

3.2.1.10. Cab Assembly. The cab assembly shall be restored to conform to drawing 97403 13226E0582 except as specified herein.

3.2.1.11. Storage Provisions. The MkII BEB provisions for storing Basic Issue Items (BII) shall be retained and modified as necessary to fit the BII currently specified.

3.2.1.12. Weapons Storage. Mounts shall be provided to secure two (2) rifles. The mounts shall accept both M16A2 and M4A2 type weapons. The mount(s) shall hold the weapons securely and shall include a secondary, independent restraint. The mount(s) shall positively secure the weapons against loss should the boat capsize. The mount(s) shall be located near the operators station.

3.2.1.13. Mast. The Mk II BEB mast and its folding and stowage characteristics shall be retained on the BEB. The mast shall be altered only if necessary and a waiver can not be obtained regarding light placement.

3.2.2. Machinery Systems. The BEB machinery, electrical, auxiliary, gauge and alarm systems shall conform to the general configuration of drawing 97403-13226E0450. The port and starboard systems shall operate independently of each other.

3.2.2.1. Propulsion System. The propulsion system shall be based upon the Cummins 210 hp engine kit (p/n CPS-210-BEB, NSN 2815-01-503-

9444), Contractor-selected transmissions and shafts, and two new propulsion jets.

3.2.2.1.1. Transmissions and Shafting. The transmissions and shafting shall be matched for the power, rpm and torque of the specified engines and jets. The gear ratio provided shall optimize the low speed, high thrust area of the jet operating envelope.

3.2.2.1.2. Water Jets. Two water jets with matched steering and scoop controls shall be provided. Steering shall be hydraulic, controlling both jets together. Scoop controls shall be power assisted, allowing the operator to change from ahead to astern operation without changing engine RPM. Inlet grill spacing (the maximum size of an object that can enter the jet) shall be minimized (1/2-inch is desired) consistent with the manufacturers recommendations.

3.2.2.1.3. Oil Sampling Provisions. A means shall be provided to sample the engine lubricating oil, transmission lubricating oil, steering hydraulic fluid and scoop control hydraulic fluid. The provisions shall be located to provide a sample representative of the operating fluid. The provisions shall be located so that samples can be taken when the system is operating. Access points or values shall be labeled to indicate their purpose and to indicate open and closed.

3.2.2.1.4. Fuel System. The MkII fuel tank, its mounting, access and level indicating systems shall be retained to the greatest extent practicable. The tank shall be clean inside and free of explosion retardant material.

3.2.2.1.5. Cooling System. The MkII keel cooling system shall be retained to the maximum extent practicable with the specified engine kit. Independent cooling shall be retained. The cooling system shall allow both engines to be operated with the BEB clear of the water, at idle speed, in neutral gear, for 10 minutes. Keel cooler capacity shall be analyzed. The coolers shall be replaced, if necessary, with a more efficient design utilizing the same interface dimensions.

3.2.2.1.6. Keel Cooler Recirculation. Piping shall be provided to draw water from the propulsion jet casings and direct it into the keel cooler recesses. Valves shall be provided if required for safety. The system shall be sized to allow the coolers to work properly when the boat is stationary and when the cooler protection kit is installed.

3.2.2.1.7. Air Intake system. The Mk II air intake system shall be modified as necessary to accommodate the specified engine kit. External filters and/or screens shall be fitted per the engine manufacturers recommendations.

3.2.2.1.8. Engine Exhaust system. The MkII exhaust system shall be retained to the greatest degree compatible with the specified engines.

3.2.2.1.9. Automatic Fire Extinguisher. An automatic fire extinguishing system shall protect the engine compartment. The system shall use FM-200 agent. A manual, back-up activation mode is desired.

3.2.2.1.10. Hand-Operated Bilge Pump. A portable, hand-operated bilge pump shall be provided. The pump shall be capable of removing water from the lowest point in the bilges at a rate of at least 6 gallons per minute.

3.2.3. Electrical System.

3.2.3.1. General Requirements. The MkII BEB electrical system shall be retained to the greatest degree compatible with the specified propulsion system and as described herein.

3.2.3.2. Wiring and Wiring Harnesses. New wires added to meet the BEB requirements shall be added as separate items, completely independent of existing MkII BEB harnesses. The wiring harnesses provided with the MKII-S shall have the following characteristics:

3.2.3.2.1 The bulk wire shall conform to current standards.

3.2.3.2.2 End connectors shall be replaced with current technology devices.

3.2.3.2.3 Intermediate connectors may be added to simplify troubleshooting and replacement.

3.2.3.2.4 Wires within harnesses and individual wires shall be labeled and color-coded.

3.2.3.3. Alternators. Alternators of sufficient capacity to meet the requirements of this specification shall be provided. This may require that the alternators in the specified engine kit be replaced.

3.2.3.4. NATO Slave Receptacle. The NATO slave receptacle shall be retained. It may be replaced with a current technology component.

3.2.3.5. Switch and Circuit Breaker Panels. The MkII BEB primary and auxiliary switch and circuit breaker panels shall be retained. The following modifications are authorized:

3.2.3.5.1 Interior components may be upgraded to current technology.

3.2.3.5.2 Bulk wire shall conform to current standards.

3.2.3.5.3 End connectors may be replaced with current technology devices.

3.2.3.5.4 Circuit breaker ratings shall match the new technology devices incorporated in other portions of the electrical system.

3.2.3.6. Searchlight. A fixed or portable searchlight shall be provided. It shall provide at least 1 lux of light at 1000 feet. The searchlight shall be capable of elevating and depressing at least 16 degrees from horizontal. It shall have a rotation of 360 degrees. These requirements may be met with a hand-held unit or fixed unit. The MkII BEB searchlight may be retained if it complies.

3.2.3.7. Electrical Horn. The MKII BEB horn shall be retained. If it is no longer available it shall be replaced with a new technology electrical horn of the same rating.

3.2.3.8. Navigation Lights. The boat shall be equipped with Navigation, Towing and Anchor lights complying with Commandant Instruction M16672.2D, as modified by Contractor obtained waiver, for the intended purposes of the BEB. The light style and method of mounting shall provide protection against damage during truck transport of the boat.

3.2.3.9. Inspection Light. An inspection light shall be provided. The MkII BEB inspection light may be retained. The MkII BEB inspection light receptacle shall be upgraded to match the new light, if required.

3.2.3.10. Electric Bilge Pumps. The electric bilge pumps shall be replaced with modern devices each having a capacity of at least 2000 gallons per hour as installed. The pumps shall operate independently. They shall be activated automatically as well as manually from the operators station. Screens to block debris shall be fitted to the pumps and their float switches if similar provisions are not incorporated in the equipment.

3.2.3.11. Alarms. The MkII audible and visual alarms shall be retained and upgraded with new technology devices. Alarms provided with the specified engine kit shall fulfill this requirement as practicable. A visual and audible alarm shall be provided with the fixed fire extinguisher system. This alarm may indicate either presence of fire or fire extinguisher system discharged.

3.2.3.12. Cab Electrical System. The MkII BEB window wipers and motors shall be replaced with modern devices of the same general configuration. The wiring harness shall be upgraded per section 3.2.3.2. The searchlight mount and electrical connector shall be upgraded to match the chosen searchlight per section 3.2.3.6.

3.2.4. Instruments and Controls.

3.2.4.1. Operators Controls. The operators control console and operators controls of the MkII BEB shall be retained as practicable. Items not included in the specified engine and jet kits shall conform to Mk II BEB characteristics.

3.2.4.2. Blackout Requirement. New items added to the BEB shall be blackout equipped or shall be fitted with switches to either secure them or change them to blackout mode. The emissions in the blackout mode shall be limited to the visible spectrum (380 to 700 nanometers). No energy shall be emitted in the 700 to 1200 nanometer portion of the electromagnetic (EM) spectrum. Emission peaks shall not exceed 1% relative to the peak emission in the visible spectrum.

3.2.4.3. Instruments. The Mk II BEB gauges and indicators shall be replaced with modern technology items. Gauges and indicators provided with the specified engine shall fulfill this requirement as practicable.

3.2.5. Basic Issue Items (BII). The following BII shall be supplied with the BEB.

3.2.5.1. Personal Flotation Devices. Three USCG approved Type I personal flotation devices (PFD) shall be provided. The PFDs shall be Army green or camouflage in color. These items are acceptable: (Small-Medium) NSN 4220-01-454-6135, (Large-Extra Large) NSN 4220-01-454-6136. Two of the PFDs shall be large size, one shall be medium size.

3.2.5.2. Ring Buoy. A USCG approved Type IV flotation device (ring buoy) shall be provided. The ring buoy shall have attached a minimum of 50 \'b1 3 ft. of \'bd-inch diameter, polypropylene line. Storage space and/or mounting provisions shall be provided.

3.2.5.3. Portable Fire Extinguisher. The BEB shall comply with the USCG requirement for portable fire extinguisher(s) with mounting bracket(s). At a minimum, a class 5BC extinguisher shall be mounted near the operators station using USCG approved brackets.

3.2.5.4. Boat Hook. The BEB shall be provided with a boat hook with a length of approximately 7 ft. The boat hook shall have ball type or pointless tips. Storage space or mounting provisions shall be provided. Boat hook NSN 2040-00-007-1136 is acceptable.

3.2.5.5. Anchor and Line. The MkII BEB anchor and line configuration shall be retained. Modern components shall be incorporated as necessary.

3.2.5.6. Lines. The MkII BEB line configurations shall be retained. The basic line material shall be modernized to 3/4 - inch diameter, double-braided nylon. Line conforming to MIL-R-24050 is acceptable.

3.2.5.7. Hand Tools. The BEB shall have a \'bc-inch wide flat tip screwdriver, (NSN 5120-00-222-8852 is acceptable), a #2 cross tip (Phillips) screwdriver (NSN 5120-00-234-8912 is acceptable) and an 8-inch adjustable wrench (NSN 5120-00-240-5328 is acceptable). Hand tools required to perform operator checks and adjustments shall also be provided.

3.2.5.8. First Aid Kit. A two-person first aid kit, similar to NSN 6545-00-922-1200, shall be provided. The supplied first aid kit shall be located in the operator station in a quickly accessible location.

3.2.5.9. Hatchet. The BEB shall be provided with a hatchet similar to NSN 5110-00-555-8868.

3.2.5.10. Document Pouch. The boat shall have a water-resistant document pouch, large enough to hold a standard 8 \'bd x 11 x 1-inch three-ring binder. Pouch, NSN 7520-00-599-9618 is acceptable.

3.2.5.11. Operators Manual. Space shall be provided for a Government furnished Operators Manual.

3.2.5.12. Keys, Pins and Handles. Keys and handles required to operate installed equipment and hatches shall be provided. Pins used as hold-opens and keys shall be tethered to prevent their loss.

3.2.6. Kits. Every boat shall have space allocated and reserved to accept the kits specified herein. Every boat shall possess the physical and electrical interfaces necessary to accept the kits. Kits shall be developed, documented, installed in boats, or provided separately as required by the Statement of Work. Kits are exempt from blackout requirements. There shall be either a circuit breaker or a switch to isolate each kit during blackout operation.

3.2.6.1. Navigation Equipment Kit (NAVKIT). The NAVKIT shall consist of a contractor selected Global Positioning System (GPS), depth sounder, antenna(s) and fathometer transducer and all integrating components. Instruments that combine these functions are acceptable. Every boat shall contain a fathometer well and dummy fathometer head as necessary. The boats and kits shall have weather proof caps or covers to protect the terminals, mounts and exposed interfaces when components are not installed. The GPS antenna shall be located on the mast. The kit shall require only common hand tools for installation.

3.2.6.2. Radio Installation Kit. The Radio Installation Kit shall consist of the brackets, wires, mounts, interface components and hardware necessary to install an AN/VRC-87E SINCGARS radio system, with LS-454 or LS-671 remote speaker and 9-foot, AS-3900 type antenna. The kit shall include components except the AN/VRC-87E. The kit shall also include weather proof caps or covers to protect the terminals, mounts and exposed interfaces when the AN/VRC-87E is not installed. The radio antenna shall be located on the mast. The kit shall require only common hand tools for installation.

3.2.6.3. Heater Kit. The heater kit shall consist of a contractor selected fixed or portable heater, and the brackets, wires, mounts, interface components and hardware necessary to install it. The heater may be either fixed or portable. It shall provide heat in the cabin area. If separately fueled it shall draw fuel from the boats fuel tank. The heater need be operable only when the engines are operating. The kit shall require only common hand tools for installation.

3.3. Not Used

3.4. Safety and Human Factors Engineering.

3.4.1. Safety. New items added to the BEB other than the specified propulsion system components shall conform to the requirements and recommended practices of SAE J98. New items shall be designed so crewmembers are not exposed to hot surfaces or dangerous corners or edges. Crew stations, platforms, deck plating and steps shall have anti-skid surfaces.

3.4.2. Noise Limits. The steady-state noise produced by the engines shall not exceed 85 dB measured at the operators station.

3.4.3. Human Factors Engineering (HFE). New items added to the BEB shall conform to Human Factors Engineering criteria as described in MIL-STD-1472F for the 5th percentile female to the 95th percentile male dressed in Mission Oriented Protective Posture (MOPP) IV and Arctic Gear. New controls shall be sized to allow operation when wearing MOPP IV garments.

3.5. Environmental and Survivability.

3.5.1. Operating Temperatures. The BEB shall perform as specified herein in any ambient temperature from -25\'b0F to +120\'b0F. Waterborne operations at low temperature are performed in the absence of ice.

3.5.2. Storage Temperatures. The BEB shall withstand indefinite storage in any ambient temperature from -50\'b0\~F to +160\'b0 F. Systems containing fluids shall be protected, by hardware or procedures, against freezing.

3.6. Materials.

3.6.1. General. Materials and components added to the BEB shall be suitable for marine (saltwater) service. The BEB hull shall have a 20-year life, from date of remanufacture, when maintained in accordance with the manufacturers instructions.

3.6.2. Prohibited Materials. Materials and components added to the BEB shall not contain asbestos, cadmium plating, toxins, hazardous materials, radiological materials or ozone depleting chemicals.

3.6.3. Corrosion Protection. Structural materials and components added to the BEB shall provide a 20 year life when maintained in accordance with recommended procedures. Machinery and electrical components shall be integrated such that their corrosion resistant properties are not degraded by the installation. Dissimilar metals shall not be used in intimate contact with each other unless protected against galvanic corrosion. Items shall be grounded and bonded per the equipment manufacturers recommendations. Through-hull penetrations shall be designed to minimize galvanic corrosion. The components of the specified engine kit shall be altered, through specification of new materials, if necessary, to comply with this paragraph.

3.6.4. Recycled and Recovered Materials. The components, pieces and parts incorporated in the BEB may be fabricated from virgin materials or they may be newly fabricated from recycled/recovered materials.

3.6.5. Used, Rebuilt and Remanufactured Components. The BEB shall be manufactured using Mk II BEB hulls. Other used, rebuilt or remanufactured components, pieces and parts may be incorporated in the BEB only with specific Government approval. The reuse of Mk II BEB fittings, equipment and appurtenances is encouraged.

3.6.6. Fluids, Lubricants and Fuels. Machinery shall function properly using U.S. Army stock fluids. Initial fills shall be compatible and interchangeable with U.S. Army Fluids. All testing shall be conducted with JP8 fuel.

3.7. Transportability.

3.7.1. Highway Transportability. The BEB, with all kits, in the IBC, loaded onto the CBT, shall be highway transportable with permits allowed for width and axle load. The maximum height of the BEB on a CBT truck, in transport configuration, shall not exceed 4 meters. The BEB shall be capable of being transported on flatbed trailers with and without the IBC. The use of improvised chocks and bracing is allowed when the IBC is not used.

3.7.2. Rail Transportability The BEB, with the IBC, in transport configuration, shall be rail transportable in CONUS and NATO counties without restrictions. The BEB, prepared for rail shipment, shall comply with the Gabarit International de Chargement (GIC) diagram (see MIL-STD-1366, Transportability Criteria) when loaded on a 50 inch high rail car. The BEB with all kits, in rail transport configuration, shall be capable of withstanding the shock loads resulting from rail impact test without failure, damage or permanent deformation.

3.7.3. Marine Transportability The BEB, with all kits, both with and without its cradle, shall be marine transportable on LCM-8 and larger vessels and ships.

3.7.4. Aircraft The BEB, with all kits, both with and without its cradle, shall be transportable by C130 and larger aircraft. The BEB, with and without its cradle, shall be transportable as an external load by CH47D helicopter.

3.7.5. Cab Stowage The cab shall be removed and stored on/in the BEB to conform to transport requirements. Brackets or attachments may be added to prevent damage during transportation.

3.7.6. Mast Stowage. Brackets or stowage provisions shall be provided for the mast.

3.7.7. Slinging and Tie Down Provisions. The BEB shall utilize the lifting and tie down provisions of the MkII BEB. Alterations and additions to the BEB shall not interfere with the use of these fittings. Access to the fittings is required for crane lifting with a 4-leg sling, lifting under a CH47D helicopter and tie down to trailers and rail cars. The provisions shall be labeled :LIFT, or LIFT/TIEDOWN, as applicable, in letters one (1) inch high.

3.8. Painting and Marking

3.8.1. Finishes. Repaired and disturbed undercoat areas of the BEB shall be painted with a coating system suitable for saltwater marine service. The entire topcoat shall be restored using a chemical agent resistant coating (CARC) paint conforming to MIL-C-53039B or MIL-DTL-64159. Topcoat CARC coating shall be applied in accordance with MIL-C-53072. The topcoat shall be single color 34094, green

383, matte finish, conforming to FED-STD-595.

3.8.2. Markings. Markings which are not provided as data plates shall be in numerals or letters one inch in height. Painted markings shall be lusterless black. Draft markings shall be placed forward and aft to indicate the Minimum and Full Load waterlines.

3.8.2.1. Safety Markings. The safe working load of the capstan and tow hook shall be displayed. Safety notices, warnings and cautions recommended by equipment manufacturers shall be displayed.

3.8.3. System Markings.

3.8.3.1. Controls. Gauges, switches, circuit breakers, lights and alarms shall be identified for function and status (on/off) when such marking is not provided as part of the item.

3.8.3.2. Valves. All valves in the bilge, cooling, fuel and lubricating systems shall be labeled. Labels shall identify the valve and indicate its normal position (open/close).

3.8.3.3. Cable Marking and Identification. All permanently installed cables shall be tagged, or otherwise permanently marked as an aid to tracing and circuit identification. Wiring which is disconnected in use, e.g. mast lighting, shall be marked for ease of reassembly.

3.8.4. Instruction, Identification and Data Plates. Instruction, data and identification plates shall be provided as necessary for the safe operation of the BEB. These plates shall be metallic, with the information stamped, embossed, etched, or engraved of commercial grade suitable for saltwater marine service. Plates located within the protected cab area may be of laminated, engraved plastic construction. Plate face surfaces shall be fade and corrosion resistant. Plates shall be permanently mounted using screws or rivets. The manufacturers commercial plates may be used with the written approval of the Contracting Officer.

3.8.4.1. Pollution Placard. A Federal Water Pollution Control Act placard or decal shall be provided near the operators station.

3.8.4.2. Boat Plate. The Mk II BEB identification plate shall be modified, or a new plate shall be provided, which includes the following information:
3.8.4.2.1 Boat Nomenclature (will be provided byt Government)
3.8.4.2.2 U.S. Army Serial Number
3.8.4.2.3 Re-manufacturers name and Contract Number
3.8.4.2.4 National Stock Number (NSN)
3.8.4.2.5 Date Re-manufactured (month and year)

3.8.4.3. Shipping Data Plate. The BEB shall be provided with a plate giving transportation data. It shall show the silhouette of the boat without cradle, indicating locations and capacity of lifting and tie down attachments, overall dimensions, weight, and location of the center of gravity, length and size of slings required. This plate shall be located adjacent to the boat plate.

3.8.5. Unique Identification Code (UID). A UID code tag shall be applied to the boat, each engine and each jet. The UID tag shall be configured, coded and applied in accordance with MIL-STD-130L.

3.9. System Integration. The inherent functionality, performance, reliability and maintainability of the BEB and new components shall not be adversely affected by the selection or integration of the new components. Fluid-carrying systems shall not leak. Mechanical systems shall not bind. Components shall be chosen, as practical, so that a single system of pipe thread is used throughout the boat and so that mixed systems do not appear on a single item.

4. PRODUCT ASSURANCE

4.1. Definitions

4.1.1. Test. A test is the systematic operation of an item under appropriate conditions, with or without instrumentation. A test includes the collection, analysis, and evaluation of quantitative data against an established standard.

4.1.2. Analysis. An analysis is the evaluation of technical or mathematical data, algorithms, charts, diagrams and historical data for compliance with an established standard.

4.1.3. Inspection. An inspection is the visual examination of an item and comparison to an established standard. Inspections are applicable to end items, components, documentation and certificates.

4.1.4. Demonstration. A demonstration is the functional check for proper operation of the end item or its components.

4.1.5. Verification. Verification is the visual examination for the presence of a feature, item or function.

4.1.6. Certificate of Conformance (C of C). A CofC is a document certifying conformance to a specific requirement or standard. Certificates are signed by a responsible party.

4.1.7. Final Inspection Record (FIR). The FIR is a permanent record which documents all evaluations performed on a production item. The FIR records both in-process and final inspection results and any corrective actions taken, for each boat produced. The FIR is a Contractor produced, Government approved document.

4.2. Classes of Assessment.

4.2.1. In-Process Inspection. In-Process Inspections are performed on every boat as the boat is being manufactured. In-Process Inspections are carried out in accordance with a Contractor developed production and quality plan. In-Process Inspections are performed on work in progress to verify quality, conformance, procedures and records. The Government witnesses and participates in In-Process Inspections at the Governments option.

4.2.2. Quality Conformance Inspection (QCI). The QCI is a final inspection of each end item performed by the Contractor. The QCI is performed before the item is presented to the Government for acceptance. This inspection includes those requirements from Section 3 that are identified in Table I. The QCI utilizes a Final Inspection Record (FIR). Successful completion of QCI is a prerequisite to signing of the DD250.

4.2.3. First Production Unit Inspection (FPUI). The FPUI is an inspection of the first unit produced. The FPUI is conducted at the place of manufacture. The FPUI combines the In-Process Inspections with a final inspection verifying that the boat complies with the requirements of Section 3 and is ready to start Shakedown Test. The Government will witness and participate in the FPUI. The FPUI shall include an examination of certificates, work instructions, process procedures, and other documents supporting the manufacturers quality and production systems.

4.2.4. Shakedown Test (ST). The ST is a test of the end item conducted by the Contractor at his site, with Government oversight. The ST evaluates the complete boat for conformance to technical requirements and confirms that the design is ready for production. The ST is conducted in accordance with an approved test plan. Table I identifies the systems and functions that will be evaluated. The ST may be repeated or continued to verify that corrective actions resulting from the initial ST are effective.

4.2.5. Control Test (CT). The CT is a test performed if there is reason to believe that production boats do not meet the technical requirements. The Government will select CT boats as needed.

4.2.6. Builders Trial (BT). The Builders Trial is a functional test performed on every production boat prior to delivery. The BT verifies that the component parts and their integration perform to a minimum standard without failure. During BT all systems of the boat are exercised. The BT is conducted in accordance with the Contractor developed, Government approved BT plan. Successful completion of BT is a prerequisite to signing of the DD250.

4.2.7. Adhesion Test. Paint film quality is verified by adhesion and corrosion resistance testing in accordance with ASTM D3359.

4.3. Evaluation Matrix. When required by contract and ordering documents, tests and evaluations shall be performed on various systems, to assess compliance with the various specifications, in accordance with Table I.

TABLE I
EVALUATION MATRIX

Type:
Quality Conformance Inspection (QCI)
First Production Unit Inspection (FPUI)
Shakedown Test (ST)
Control Test (CT)
Builders Trial (BT)

QCI	FPUI	ST	CT	BT	EVALUATION	SECTION 3 REF	METHOD (see notes)
					Description	3.1	7
					Physical Characteristics	3.2	7
X	X			X	Hull	3.2.1	5
X	X			X	Structural Alternations	3.2.1.1	5, 6
X	X				Interface Dimensions	3.2.1.2	2, 3

X	X			X	Buoyancy and Stability	3.2.1.3	2, 3, 5
X	X				Compartmentation	3.2.1.4	3
X	X				Grounding Protection	3.2.1.5	3
X	X	X	X		Keel Cooler Protection	3.2.1.6	2, 3, 4
X	X	X	X	X	Engine Hatch Modification	3.2.1.7	3,4
X	X				Anodes	3.2.1.8	2, 3
X	X				Operators Station	3.2.1.9	3
X	X				Cab Assembly	3.2.1.10	3
X	X	X	X	X	Storage Provisions	3.2.1.11	3, 4
X	X	X	X	X	Weapons Storage	3.2.1.12	3, 4
X	X				Mast	3.2.1.13	3, 6
X	X				Machinery Systems	3.2.2	3
X	X				Propulsion System	3.2.2.1	3
X	X				Transmission and Shafting	3.2.2.1.1	2, 3, 6
X	X				Water Jets	3.2.2.1.2	3
X	X	X	X	X	Oil Sampling Provisions	3.2.2.1.3	3, 4
X	X	X	X	X	Fuel System	3.2.2.1.4	3, 4
X	X	X	X	X	Cooling System	3.2.2.1.5	1, 2, 3, 4
X	X	X	X	X	Keel Cooler Recirculation	3.2.2.1.6	1, 2, 3, 4
X	X				Air Intake System	3.2.2.1.7	2, 3
					Engine Exhaust System	3.2.2.1.8	7
X	X				Automatic Fire Extinguisher	3.2.2.1.9	2, 3, 6
X	X	X	X	X	Hand Operated Bilge Pump	3.2.2.1.10	2, 3, 4
					Electrical System	3.2.3	7
X	X	X	X	X	General Requirements	3.2.3.1	3, 4
X	X	X	X	X	Wiring and Wiring Harnesses	3.2.3.2	2, 3, 4
X	X	X	X	X	Alternators	3.2.3.3	2, 3, 4
X	X	X	X	X	NATO Slave Receptacle	3.2.3.4	3, 4
X	X	X	X	X	Switch and Circuit Breaker Panels	3.2.3.5	2, 3, 4
X	X	X	X	X	Searchlight	3.2.3.6	2, 3, 4
X	X				Electrical Horn	3.2.3.7	2, 3
X	X				Navigation Lights	3.2.3.8	2, 3, 6
X	X	X	X	X	Inspection Light	3.2.3.9	4, 5
X	X	X	X	X	Electrical Bilge Pumps	3.2.3.10	2, 3, 4
X	X	X	X	X	Alarms	3.2.3.11	2, 3, 4
X	X	X	X	X	Cab Electrical Systems	3.2.3.12	2, 3, 4
					Instruments and Controls	3.2.4	7
X	X			X	Operators Controls	3.2.4.1	5
X	X	X	X	X	Blackout Requirement	3.2.4.2	3, 4, 6
X	X	X	X	X	Instruments	3.2.4.3	3, 4
					Basic Issue Items	3.2.5	7
X	X				Personal Flotation Device	3.2.5.1	5
X	X				Ring Buoy	3.2.5.2	5
X	X				Portable Extinguisher	3.2.5.3	5
X	X				Boat Hook	3.2.5.4	5
X	X				Anchor and Line	3.2.5.5	5
X	X				Lines	3.2.5.6	5
X	X				Hand Tools	3.2.5 7	5
X	X				First Aid Kit	3.2.5.8	5
X	X				Hatchet	3.2.5.9	5
X	X				Document Pouch	3.2.5.10	5
X	X				Operators Manual	3.2.5.11	5
X	X				Keys, Pins and Handles	3.2.5.12	5
X	X	X	X	X	Kits	3.2.6	5, 4
X	X	X	X		Navigation Equipment Kit (NAVKIT)	3.2.6.1	3, 5 always 1, 3, 4 when installed
X	X	X	X		Radio Installation Kit	3.2.6.2	3, 5 always 1, 3, 4 when Installed
X	X	X	X		Heater Kit	3.2.6.3	3, 5 always 1, 3, 4 when Installed

					Reserved	3.3	7
					Safety and Human Factors Engineering	3.4	7
	X				Safety	3.4.1	2
X	X		X	X	Engine Hatch Hazard	3.4.1.1	3, 4
	X		X	X	Noise Limits	3.4.2	1, 2
X	X				Human Factors Engineering	3.4.3	2, 3
					Environmental Survivability	3.5	7
	X		X	X	Operating Temperatures	3.5.1	1, 2
	X		X	X	Storage Temperatures	3.5.2	1, 2
					Materials	3.6	7
	X				General	3.6.1	2
X	X				Prohibited Materials	3.6.2	3
X	X				Corrosion Protection	3.6.3	2, 3, 6
					Recycled and Recovered Materials	3.6.4	7
	X				Used, Rebuilt and Remanufactured Components	3.6.5	2
	X	X	X	X	Fluids, Lubricants and Fuels	3.6.6	2, 4, 6
					Transportability	3.7	7
	X	X	X		Highway Transportability	3.7.1	1, 2
	X	X	X		Rail Transportability	3.7.2	1, 2
	X				Marine Transportability	3.7.3	2
	X				Aircraft	3.7.4	2
	X	X	X	X	Cab Stowage	3.7.5	1, 2
	X	X	X	X	Mast Stowage	3.7.6	1, 2
X	X				Slinging and Tie Down Provisions	3.7.7	2, 3
					Painting and Marking	3.8	7
X	X	X	X	X	Finishes	3.8.1	3, 4, 6, 8
X	X				Markings	3.8.2	3
X	X				Safety Markings	3.8.2.1	3
					System Markings	3.8.3	3
X	X				Controls	3.8.3.1	3
X	X				Valves	3.8.3.2	3
X	X				Cable Marking and Identification	3.8.3.3	3
X	X				Instruction, Identification And Data Plates	3.8.4	3
X	X				Pollution Placard	3.8.4.1	3
X	X				Boat Plate	3.8.4.2	3
X	X				Shipping Data Plate	3.8.4.3	3
X	X				Universal Identification Code	3.8.5	3
X	X	X	X	X	System Integration	3.9	2, 3, 4

Notes: Evaluation method key:
1. Test
2. Analysis
3. Inspection
4. Demonstration
5. Verification
6. Certification
7. No Evaluation Required
8. Paint Adhesion Test

5. ACQUISITION REQUIREMENTS.

5.1 When this PD is used for acquisition, the procurement documents shall specify the following:

5.1.1 Title, number, and date of this specification.

5.1.2 Issue of DoDISS to be cited in the solicitation and, if required, the specific issue of individual documents referenced.

5.1.3 Identification of required tests.

5.1.4 Quantity of BEBs to test.

5.1.5 Packaging requirements.

5.1.6 Requirements for Kits.

5.1.7 Paint top coat color.

ATTACHMENT 2

CONFIGURATION MANAGEMENT DOCUMENTATION

3 MARCH 2004

CONFIGURATION MANAGEMENT AND TECHNICAL DATA PACKAGE FOR THE BRIDGE ERECTION BOAT

1.0 General:

1.1 The Mk II BEB is a fielded item. The procedures herein describe how configuration will be controlled while and after the boat is upgraded to BEB configuration. This effort does not redefine existing configurations, and does not re-document previously documented items. Development of a technical data package is limited to the requirements herein. Configuration management of the BEB will start with the documentation as it exists at the time of contract award.

1.2 The contractor shall:
1.2.1 Establish a configuration for the BEB.
1.2.2 Develop a Technical Data Package (TDP) which consists of these items:
1.2.2.1 An indented bill of materials that captures the components of the BEB as delivered.
1.2.2.2 Drawings of parts, assemblies, kit components and shipping containers.
1.2.2.3 Installation instructions, parts lists, inspection requirements, product assurance documents necessary to support fabrication of the BEB.
1.2.2.4 Documentation of Kits.
1.2.3 Maintain the above documents current:
1.2.3.1 By submitting documents (requests for deviation and engineering change proposal) prior to altering approved hardware or its documentation.
1.2.3.2 By revising TDP components.
1.2.3.3 Providing a repository for the TDP elements.

2.0 Configuration Baselines:

2.1 Initial Configuration. The configuration for the Mk II BEB is established by Drawing, 97403 13226E0450, Boat, Bridge Erection, Twin Jet, Aluminum Hull, Model USCSB MK2, Revision L and its companion parts list. Work performed under this contract will alter that configuration. The first BEB configuration is established by the preliminary design. The preliminary design will be approved and a production design will be established. The final design will be established after the completion of tests and adjustment of the TDP to account for feedback. The contractor shall document changes to the configuration in accordance with MIL-HDBK-61A as tailored herein.

3.0 TDP Elements.

3.1 Bill of Materials.

3.1.1 The contractor shall develop an indented Bill Of Materials (BOM) for the BEB. The BOM shall be developed in conjunction with the provisioning process and the structure of its indentures shall conform to the structure used in developing provisioning information. The detail of the BOM shall extend to the lowest provisioned item of each system or assembly. Provisioned level is determined by the provisioning process. Development of the BOM shall be coordinated with the personnel developing the provisioning data. The BOM shall be in contractor format and shall include, at a minimum:

3.1.1.1 Identifying name for each item.
3.1.1.2 Identifying number for each item.
3.1.1.3 Indication of component of and contains these components for each item.
3.1.1.4 The applicable revision level of each item.
3.1.1.5 Quantity of the item in each application.

3.1.2 The BOM shall be submitted at the Preliminary Design Review (PDR). A revised BOM shall be submitted at each subsequent design review, the Production Review, at each provisioning conference and the Physical Configuration Audit. A revised BOM shall be submitted upon incorporation of each approved engineering change that alters the boat hardware content. Initial and subsequent submissions of the BOM shall be in accordance with CDRL A003.

3.2 Drawings.

3.2.1 General. The contractor shall develop drawings to describe the completed boat, to support provisioning, to support the installation of kits and to support technical manual development. Drawings shall be in contractors format. The contractor may use ASME Y14.24, ASME Y14.100, DOD-STD-0100D (AR) and MIL-DTL-31000B as references. Drawings shall be in American English language.

3.2.1.1 Structure Drawings. The contractor shall furnish a drawing similar to 97403-13226E0449, depicting only the alterations to the hull structure necessary to install the new equipment. All interfaces for installed equipment shall be depicted, i.e. holes, brackets and foundations. The contractor shall furnish a drawing similar to 97403-13226E0581 depicting the alterations to the cab. A similar drawing is required for the mast.

3.2.1.2 Assembly Drawings. The contractor shall furnish a drawing similar to 97403-13226E0450, depicting how new parts are located and assembled. The drawing shall include a list of the parts and consumables required, and specifications governing assembly (such as torque values, inspections and tests). The contractor shall furnish a drawing similar to 97403-13226E0230, depicting the cab assembly. A similar drawing is required for the mast.

3.2.1.3 Provisioning Drawings. The contractor shall develop, submit and maintain drawings of all provisioned items and assemblies. These drawings shall contain sufficient information to allow the Government to purchase the item(s). (Reference SOW C.4.3.5) Commercial items shall be described using Source Control or Specification Control drawings as defined by MIL-STD-100G. Contractor-manufactured items and alterations to existing items shall be defined completely. Provisioned items which are assemblies of provisioned items shall be described by assembly drawings. Assembly drawings shall include lists of the parts and consumables, and specifications governing assembly (such as torque values, inspections and tests). Drawings are not required for provisioned items which are already fully provisioned (have an NSN) or which are defined by a commercial or Government standard (e.g. ANSI, DIN, MS, etc,). The reusable containers are provisioned items for the purpose of documentation.

3.2.1.3.1 Altered Items. Drawings of altered items shall clearly indicate what the original part was and how the part was altered to become the new part. The alterations shall be described to the same degree as for a newly manufactured item.

3.2.1.4 Stowage Plan Drawing. The contractor shall furnish drawing which indicates assigned stowage location for the BII and other removable components of the boat (such as rafting brackets). The Stowage Plan Drawing shall serve the function of BII assembly drawing such that BII items are listed as components.

3.2.1.5 Markings Drawing. The contractor shall furnish a drawing which indicates the location of painted labels, warnings, draft marks and informational stencils. The wording of the markings shall be included. Manufactured data plates that are not included in the top assembly drawings (paragraph 3.2.1.2) shall be included on the Markings Drawing.

3.2.1.6 Transportability Drawing. The contractor shall furnish a drawing which indicates how the boat is prepared for transportation. The drawing shall include how to secure the mast, cab and other removable items. This drawing shall include the design of any chocks and blocks used when the boat is transported without its cradle.

3.2.1.7 Technical Manual Fold-Outs. The contractor shall submit schematic drawings, sized and formatted for use as fold-outs in the Technical Manuals. Sample formats can be found in MIL-HDBK-1222B, Figures B30 and B31. Coordination with the technical manual developers is required to determine the number and content of fold-outs. For planning purposes fold-outs are required for the electrical, fuel, hydraulic steering and scoop control, and raw water and jacket water systems.

3.2.1.8 Kit Drawings. The contractor shall develop, submit and maintain drawings that describe kits as defined by DOD-STD-0100D (AR), Section 201.9.10. Each kit drawing package shall contain Kit Drawing (this is similar to a parts list), a kit installation drawing, and drawings of the individual kit components. The Kit Drawing carries the Government assigned the kit number. The kit component drawings shall contain the same information as Provisioning Drawings, per 3.1.2.3 above.

3.2.2 Drawing Submission Requirements.

3.2.2.1 Provisioning Drawings. Drawings to support provisioning shall be submitted in draft form with the provisioning data for the item or assembly described. This applies to items provisioned against the boat and to items provisioned as components of kits. Final provisioning drawings shall be submitted within 90 days after submission of the draft drawings. Provisioning drawings shall be submitted electronically in a printable format (i.e. .DWF, .DWG, .PDF, etc). Drawings shall be submitted in accordance with CDRL A003.

3.2.2.2 Kit Drawings. Kit Drawings and kit installation drawings shall be submitted in draft form concurrent with the start of production. Final kit drawings shall be submitted concurrent with the PCA. Kit drawings shall be submitted electronically in a printable format (i.e. .DWF, .DWG, .PDF, etc). The Transportability, Markings, Stowage, Assembly and Structure drawings shall also be submitted using this schedule. Drawings shall be submitted in accordance with CDRL A003.

3.2.2.3 Fold-Out Drawings. Fold-out drawings shall be submitted in draft form concurrent with submission of the draft manuals. Draft fold-outs shall be submitted as fold-out pages in the draft manuals, in the format of the draft manuals. Final foldouts shall be submitted as pages in the final manuals, in the format of the final manuals. Fold-outs shall be submitted in accordance with CDRL A004.

3.2.2.4 Engineering Change Documentation. Drawings and drawing excerpts supporting engineering changes shall be submitted electronically in a printable format (i.e. .DWF, .DWG, .PDF, etc.). These items shall be included in the change request documentation.

3.2.2.5 Wrap-up Drawing Delivery. Upon conclusion of the contract the contractor shall deliver, electronically, two copies of each approved and accepted drawing. One copy shall be in a printable, non-alterable format (i.e. .DWF, .PDF, etc). The second copy shall be in an alterable format compatible with Autocad software (i.e. .DWG). Drawings shall be submitted in accordance with CDRL A004.

3.2.3 Drawing Approval. The Government will not approve Provisioning Drawings. Acceptance of the provisioning data for an item or assembly constitutes acceptance of the drawing. The Government will not approve Fold-Out Drawings. Acceptance of the final publication(s) constitutes acceptance of the drawing. The Government will approve the Kit, Kit Installation, Transportability, Markings, Stowage, Assembly and Structure drawings. These drawings will be compared to the actual boat during the PCA. The drawings will be signed upon successful completion of the PCA.

3.3 Part Numbers. The contractor shall ensure that part numbers are assigned to all provisioned items. When a TACOM part number is used, the part number and the drawing number shall be the same. Commercial part numbers shall be used for all purchased and commercially available items. TACOM drawing numbers in the series, 19207-12492140 through 19207-12492333 and 19207-12492423 through 19207-12492622 have been assigned to the BEB. Part numbers consumed on the XM20 project, 19207-12491856 through 19207-12492055 and 19207-12492134 through 19207-12492139 shall not be reused. The Government will provide numbers for the Kit Drawings upon request.

3.4 Standards and Specifications. The standards and specifications developed by the contractor (Reference SOW paragraph C.2.3.) shall be included in drawings.

4.0. TDP Maintenance.

4.1 The Contractor shall utilize the Configuration Control organization developed under Contract W56HZV04-C-0534 to develop and submit configuration change documentation, incorporate approved changes into the TDP, maintain the configuration of the hardware and incorporate approved changes into the hardware. Configuration Management for the BEB shall be based upon and utilize CM documents (such as the Contractors CM plan, audits and TDP) developed under Contract W56HZV-04-C-0534. Handbook MIL-HDBK-61A provides guidance on developing a CM organization and administering CM changes.

4.2 Change Proposals. The contractor shall document changes to the final configuration through the use of Requests for Deviation (RFD) and Engineering Change Proposals (ECP). Requests for changes shall be submitted to PM-Bridging for approval. Changes to hardware or documentation shall not precede PM-Bridging approval. Handbook MIL-HDBK-61A, Section 6 and Section 7, provides guidance on the development of RFD and ECP. Each proposal shall be accompanied by sufficient documentation to describe the change, the need for the change, the impact of the change (cost, safety, transportability, function, performance, etc.), the effective date/unit of the change and the method of applying the change to the hardware. Drawing revisions shall be described by Notices of Revision (NOR).

4.3 Change Initiation. Changes can be initiated by either the Government or the contractor. The contractor shall propose changes to correct test deficiencies or to ensure continued compliance with ATPD 2317.

4.3.1 Mk II Configuration. Changes to the Mk II configuration prior to the preliminary design need not be tracked. Submission of the preliminary design establishes the initial configuration of the BEB. Government approval of the preliminary design constitutes approval of the proposed changes.

4.3.2 Preliminary Design. The contractor shall track changes to the approved preliminary design. The Government will approve changes in equipment type and location that may affect compliance with the specification (ATPD 2317). Notification of proposed changes and approval of changes shall be in writing (E-mail or letter). Government approval at the Critical Design Review constitutes approval of all other changes.

4.3.3 Production Design. The contractor shall track changes to the approved production design. The Government will approve all changes. Notification of proposed changes and approval of changes shall be in writing (E-mail or letter). Government approval at the Critical Design Review constitutes approval of all other changes.

4.3.4 Final Design. The contractor shall submit RFDs and ECPs to document proposed changes to the Production Baseline. The Government will approve or reject proposed changes. Hardware and the TDP shall not be changed until the RFD or ECP is approved. This requirement starts with the approval of the Configuration Audit.

4.4 Change Documentation. Handbook MIL-HDBK-61A, Chapter 6 shall be used as a guide in developing the documentation to support a change request. Contractor developed formats or Government forms may be used. The format is optional provided that the content of the documentation complies with the recommendations of MIL-HDBK-61A and this Appendix. Change documentation shall be developed and processed in accordance with CDRL A005.

4.5 Configuration Status Maintenance. The contractor shall maintain configuration status records using MIL-HDBK-61A, Section 7 as guidance. Status shall be maintained through control of the TDP, through a configuration status log for each boat, and through application of retrofits.

4.5.1 Revisions to the TDP. Government approval of an ECP or RFD constitutes authority to revise the TDP. The contractor shall then alter the TDP documents (drawings) with the changes reflected by the NORs. The contractor shall incorporate the change into the TDP and hardware on a schedule negotiated by the Government during approval of the change.

4.5.2 Boat Configuration Log. The contractor shall generate a configuration status log (CM Log) for each boat. This log shall be maintained by the contractor from the time of hull acceptance through the life of the contract. The log shall be in contractor format and may be electronic or hard copy. Responsibility for log maintenance after the completion of the production contract shall be subject to negotiation. The log shall be available for Government review. A copy of the log shall be provided to the Government upon request. The log shall be developed in accordance with CDRL A006. The log shall contain the following data, as a minimum:

4.5.2.1 BEB Serial Number.
4.5.2.2 The original (Mk II) hull or identifying number.
4.5.2.3 Incoming survey results.
4.5.2.4 Date assembly as a BEB was completed.
4.5.2.5 Serial numbers of the engines, jets, gear boxes and warranted items.
4.5.2.6 Unit Identification (UID) codes of the boat, engines and jets.
4.5.2.7 Contractor's final inspection record and date.
4.5.2.8 Government acceptance inspection and acceptance date.
4.5.2.9 Warranty start date.
4.5.2.10 Date of incorporation of ECP and RFD.
4.5.2.11 Hand-off date and initial fielding location / unit.
4.5.2.12 List of contractor applied kits.

4.5.3 Retrofits. Configuration changes resulting from RFD and ECP shall be incorporated into boats as directed by the Government. Hardware used to perform alterations shall be provided as kits, in bulk or incorporated into production as directed by the Government. The responsibility for performing alterations, the method of applying alterations and the schedule for applying alterations will be negotiated during the RFD /ECP approval process.

4.5.4 Wrap-up TDP Delivery. Upon conclusion of the contract the contractor shall deliver, electronically, two copies of the TDP less drawings. The delivery shall be in a printable format (Excel, Word, .DWF, .PDF, etc). Paragraph 3.2.2.5 above covers drawings delivery. The TDP shall be submitted in accordance with CDRL A004.

CONVERSION REQUIREMENTS FOR AN Mk I BRIDGE ERECTION BOAT (BEB) TO AN Mk II BEB FOR PURPOSES OF PREPARING FOR REMANUFACTURE AS A BEB

1. General.

This document describes the requirements to convert an Mk I BEB hull into an Mk II BEB hull for the limited purpose of allowing further conversion of the hull to BEB standards.

2. References.

AWS D1.2/D1.2M:2003 - Structural Welding Code Aluminum

Drawing 97403-13226E0449 Hull Structure, USCSB MK2
Drawing 97403-13226E0581 Cab Construction
Drawing 97403-13214E8326 Aluminum Welding Specifications

3. Requirements.

3.1 Alterations.

3.1.1 Keel Coolers. In accordance with drawing 97403-13226E0449 install two keel cooler pockets. The materials and process used shall conform to the drawing with the exception that welding may be performed in accordance with AWS D1.2/D1.2M:2003 in lieu of 97403-13214E8326.

3.1.2 Raw Water Inlets. The raw water inlet hull penetrations and standpipes shall be removed. The altered hull shall conform to drawing 97403-13226E0449. Hull penetrations shall be replaced by flush, welded inserts of the hull material specified by the drawing. Welding may be performed in accordance with AWS D1.2/D1.2M:2003 in lieu of 97403-13214E8326.

3.1.3 Push Knees. The existing push knees shall be removed. Pads, reinforcements and attaching point that do not interfere with the Mk II style push knees need not be removed. Push knees conforming to drawing 97403-13226E0449 shall be installed. Reinforcing plates required by the drawing may have their locations adjusted to account for access restrictions. Welding may be performed in accordance with AWS D1.2/D1.2M:2003 in lieu of 97403-13214E8326.

3.2 Interface Assessments.

3.2.1 Aft Cockpit. The aft cockpit interface dimensions and mounting provisions shall be checked for conformance to drawing 97403-13226E0449. Nonconformance shall be recorded. A note shall be entered in the boats records that a non-standard aft cockpit is required.

3.2.2 Jet Compartment Hatches. The jet compartment hatch interface dimensions and mounting provisions shall be checked for conformance to drawing 97403-13226E0449. Nonconformance shall be recorded and a note shall be entered in the boats records that non-standard hatches are required.

3.2.3 Engine Compartment Hatches. The engine compartment hatch interface dimensions and mounting provisions shall be checked for conformance to drawing 97403-13226E0449. Nonconformance shall be recorded and a note shall be entered in the boats records that non-standard hatches are required.

3.2.4 Cab Interface. The cab interface dimensions and mounting provisions shall be checked for conformance to drawing 97403-13226E0581. Nonconformance shall be recorded and a note shall be entered in the boats records that non-standard cab is required.

3.2.5 Mast Mountings. The mast interface dimensions and mounting provisions shall be checked for conformance to drawing 97403-13226E0449. Nonconformance shall be recorded and a note shall be entered in the boats records that a non-standard mast is required.

3.2.6 Fuel Tank Interface. The fuel tank interface dimensions and mounting provisions shall be checked for conformance to drawing 97403-13226E0449. Nonconformance shall be recorded and a note shall be entered in the boats records that non-standard fuel tank is required.

3.2.7 Divers Platform. The interface dimensions and mounting provisions for the folding divers platform inserts shall be checked for conformance to drawing 97403-13226E0449. Nonconformance shall be recorded and a note shall be entered in the boats records that non-standard inserts are required.

3.3 Correction of Interfaces. Interface discrepancies shall be corrected only when directed by the Government.

3.4 Weld Inspections. All welds made during these alterations shall be visually inspected. Welds in watertight boundaries shall be further inspected by dye penetrant or other means that verifies the watertight condition of the resulting joint.

Attachment 003 has been replaced under P00001 to this contract by Attachment 004.

Attachment 004 has been replaced under P00005 to this contract by Attachment 006.

ASL, Unit Level Tools & Sustainment Tools (AWS-25 Rev 1)

Description	Part No.	QTY.
Lamp, Incandescent-Inst. Panel	CMS 0434310 (71224-01)	2
Lamp, Incandescent-Nav Light	0375-24V-25W	12
Lamp, Incandescent-Nav Light	0375-24V-10W	12
Nav Light-Port	0200PT024V	1
Nav Light-Mast Head	0200MT024V	1
Nav Light-Stern	0200SNT24V	2
Nav Light-Towing	0200TWT24V	2
Nav Light-Steaming	0200SWB24V	1
Nav Light-Stbd	0200SDT24V	1
Lamp, Incandescent-Insp. Light	073497	1
Lamp, Incandescent-Search Light	D9850	1
Fuse 63A, Fast Acting Chrg Circ	156-8973	2
5A Circuit Breaker Sear. Panel	CB1422-830-46-5A	1
20A Circuit Breaker Sear. Panel	CB1422-830-46-20A	1
On Button C/W Collet	CB100-01-46	2
Off Button	CB100-03-46	2
Niphan 5 Pin Plug-Cab/Mas Plug	N527/5 (X5S)	1
Niphan 5 Pin Socket-Cab/Mas Socket	N549/5 (X5A)	1
Niphan 2 Pin Plug-Searchlight Inspec light Plug FM200 Rel Plug	N600 (12S)	1
Niphan 2 Pin Socket-Searchlight Inspec Light Socket	N662 (12A)	1
Wiper Blade	C-1100-2-18	4
O Ring, SW Stainer	RW35	6
Filter Separator, Fuel/Water	5836B120	2
Filter, High Pressure Fuel	FF 5052	14
Filter, Lube Oil (Spin On)	LF 3959	4
Gear Oil Cooler Hose Assy/Suction	CMS 0535107	1
Gear Oil Cooler Hose Assy (Dischg)	CMS 0535106	1
Filter, Air Intake (Turbocharger)	AH 19003	2
Filter, Engine Crankcase Breather	CMS 0535185	2
Cab Plug Installer Handle	3164085 (was 3376795)	1
Cab Plug Driver	3823520	1
Expansion Plug Driver	3376816	1
Oil Fill Cap Plug Installer	3376817	1
Piston Ring Expander	3823137	1
Vacuum Gauge and Hose	ST434	1
Oil Pressure Indicating Gauge	3375275	1
Inspector Puller	3164706	2
Dial Indicating Kit	4918193 (was 3377259)	1
Nozzle Cleaning Kit	3376947	2
Piston Ring Compressor	3823294	1
Barring Tool	3824591	2
Injector Pump Drive Gear Puller	3163381	2
Impeller Puller	TD120891	2
Drive Flange Spanner	TD321256	2
Drive Shaft Support Tool	TD321257	2
Shaft Locking Tool	TD321273	2
Drive Flange Remover	TD321258	2
Impeller Wear Sleeve Expander	TD321268	2
Mech Seal Assy Tool	TD621250-1	3
Mech Seal Removal Tool	TD321272	2
Water Lube Bearing Press Tool	TD321259	1
Steer Shaft Bush/Seal Assy Tool	TD120966	1
Nozzle Bush Assy Tool	TD120959	1
Steering Deflector Bush Assy Tool	TD321269	1
Rev Deflec Pivot Bush Assy Tool	TD120961	1
Rev Deflec Cyl Bush Assy Tool	TD120960	1
Steer Support Bracket Bush Tool	TD121046	1
Bearing Casing Seal Asst Tool	TD120962	2

Standalone Sustainment Level Tools

Description	Part No.	QTY
Cap Plug Installer Handle	3164085 (was 3376795)	1
Cap Plug Driver	3823520	1
Expansion Plug Driver	3376816	1
Oil Fill Cap Plug Installer	3376817	1
Piston Ring Expander	3823137	1
Vacuum Gauge and Hose	ST434	1
Oil Pressure Indicating Gauge	3375275	1
Dial Indicating Kit	4918193 (was 3377259)	1
Kit Nozzle Cleaning	3376947	1
Compressor, Piston Ring	3823294	1
Water Lube Bearing Press Tool	TD321259	1
SteerShaftBush/Seal Assy Tool	TD120966	1
Nozzle Busy Assy Tool	TD120959	1
Steer Deflect Bush Assy Tool	TD321269	1
Rev Deflect Pivot Bush Assy Tool	TD120961	1
Rev Deflect Cyl Bush Assy Tool	TD120960	1
Steer Support Brack Bush Tool	TD121046	1
Impeller Puller	TD120891	1
Drive Flange C Spanner	TD321256	1
Drive Shaft Support Tool	TD321257	1
Shaft Locking Tool	TD321273	1
Drive Flange Removal Tool	TD321258	1
Impell Wear Sleeve Expand Tool	TD321268	1
Mech Seal Assy Bullet	TD621250-1	1
Mech Seal Removal Tool	TD321272	1
Bearing Casing Seal Assy Tool	TD120962	1
Barring Tool	3824591	1
Inject Pump Drive Gear Puller	3163381	1
Injector Puller	3164706	1

ATTACHMENT 006

BEB Milestone Billing Schedule
FBM Babcock Marine Limited

Contract W56HZV-04-D-0318

Event Code	BEB	Program Value	Date
	No. 1-3		
1	On shipment of Materials - 80 per cent	$ 527,677.30	29 Apr 05
2	On Acceptance - 20 per cent	$ 131,919.33	30 Jun 05
	CLIN 1001AA	$ 659,596.63	
	No. 4-9		
3	On shipment of materials - 80 per cent	$ 1,068,355.20	29 Apr 05
4	On Acceptance - 20 per cent	$ 267,088.80	31 Oct 05
	CLIN 2001AA		
	No. 10 14		
5	On shipment of Materials - 80 per cent	$ 890,296.00	27 May 05
6	On Acceptance - 20 per cent	$ 222,574.00	31 Oct 05
	CLIN 2001AA	$ 1,112,870.00	
	NAVKIT		
7	On Acceptance - 100 per cent	$ 2,868.00	31 Oct 05
	CLIN 2001AB	$ 2,868.00	
	CONV BEB HULS MKI to MKII		
8	On Acceptance - 100 per cent	$ 52,566.00	31 Oct 05
	CLIN 2004AA	$ 52,566.00	
	CONTRACTOR FIELDING SUPPORT		
9	On Acceptance - 100 per cent	$ 81,060.00	31 Oct 05
	FOLLOW-ON NET TRAINING		
10	Session 1 - 50 per cent	$ 19,212.00	31 Oct 05
11	Session 2 - 50 per cent	$ 19,212.00	31 Oct 05

	CLIN 0001AG	$ 38,424.00	
	BEBs 1-3	$ 659,596.63	CLIN 1001AA
	BEBs 4-14	$ 2,448,314.00	CLIN 2001AA
	NAVKIT	$ 2,868.00	CLIN 2001AB
	CONV BEB HULLS MKI TO MKII	$ 52,566.00	CLIN 2004AA
	CONTRACTOR FIELDING SUPPORT	$ 81,060.00	CLIN 0001AE
	FOLLOW-ON NET TRAINING	$ 38,424.00	CLIN 0001AG
		$ 3,282,828.63	
	Year Three		
	CLIN 3001AA (BEB)		
	No. 1-8		
12	On Shipment of Materials 80 percent	$ 1,471,129.60	31 May 06
13	On Acceptance 20 percent		
	Boat 1	45,972.80	31 Jul 06
	Boat 2-4	137,918.40	31 Aug 06
	Boat 5-6	91,945.60	30 Sep 06
	Boat 7-8	91,945.60	31 Oct 06
	No. 9-14		
14	On Shipment of Materials 80 percent	$ 1,103,347.20	30 Jun 06
15	On Acceptance 20 percent		
	Boat 9-10	91,945.60	30 Nov 06
	Boat 11-12	91,945.60	31 Dec 06
	Boat 13-14	91,945.60	31 Jan 07
	Year Three		
	CLIN 3001AB		
16	5 NavKits On Acceptance - 100 percent	$ 7,385.00	31 Jan 07
		$ 3,225,481.00	
	Year Four		
	CLIN 4001AA		
	Boats 1-21		
1	On Shipment of materials 80 percent	$ 379,844.80	29 Mar 07
3	On Acceptance 20 percent	94,961.20	27 Jul 07
	Boats 1-2		
4	On Shipment of materials 80 percent	$ 759,689.60	29 Mar 07
6	On Acceptance 20 percent	189,922.40	31 Aug 07
	Boats 3-6		
7	On Shipment of materials 80 percent	$ 759,689.60	29 Mar 07
9	On Acceptance 20 percent	189,922.40	28 Sep 07
	Boats 7-10		
10	On Shipment of materials 80 percent	$ 379,844.80	29 Mar 07
12	On Acceptance 20 percent	94,961.20	31 Oct 07
	Boats 11-12		
13	On Shipment of materials 80 percent	$ 379,844.80	9 May 07
15	On Acceptance 20 percent	94,961.20	31 Oct 07
	Boats 13-14		
16	On Shipment of materials 80 percent	$ 759,689.60	9 May 07
18	On Acceptance 20 percent	189,922.40	30 Nov 07

	Boats 15-18			
19	On Shipment of materials 80 percent	$ 569,767.20	9 May 07	
20	On Acceptance 20 percent	142,441.80	21 Dec 07	
	Boats 19-21			
	CLIN 4004AA			
	Boats 1-15			
2	On Acceptance 100 percent	19,242.00	6 Jul 07	
	Boat 1-2			
5	On Acceptance 100 percent	38,484.00	10 Aug 07	
	Boat 3-6			
8	On Acceptance 100 percent	38,484.00	7 Sep 07	
	Boat 7-10			
11	On Acceptance 100 percent	19,242.00	10 Oct 07	
	Boat 11-12			
14	On Acceptance 100 percent	19,242.00	10 Oct 07	
	Boat 13-14			
17	On Acceptance 100 percent	9,621.00	9 Nov 07	
	Boat 15			
	CLIN 4001AB			
	NavKits			
21	8 On Acceptance 100 percent	12,176.00	30 Nov 07	
	Total (Year 4)	$5,141,954.00		

Listing of MK I and MK II items to salvage from GFP, boats.

Component	TM 20P Figure(Item) Ref	QTY	NSN
Sabre Engine Assembly		2	2815-01-233-8393
Dowty Hydrojet Unit, Two-stage	71(37-99)	2	2010-01-123-3088
Rotary Control Assembly	73 (1-27)	1	2010-99-477-3970
Hydrojet Steering Assembly	72 (1-96)	2	2030 01-128-1846
Transmission, Marine	70 (1-17)	2	2010-01-143-2719
Fuel Injection Pump	58 (1-46)	2	2910-01-121-5173
Exhaust Manifold	56 (1-12)	2	BEB-49049
Inlet Manifold	56 (6-10)	2	BEB-49270
Starter Assembly	55 (1-74)	2	2920-99-823-6004
Air Cleaner Assembly	54 (1-10)	2	BEB-45604
Sump Pump W/Pulley	53 (1-10)	2	4930-99-209-3694
Blocking Diode	51 (5-8)	2	5961-01-120-7510
Link Solonoid	51 (1-4)	2	5945-01-120-7588
Voltage Regulator (in Green Control Box)	49 (30)	2	2920-01-351-5785
Electric Solonoid	49 (11)	2	5945-01-121-0776
Gearbox Tachometer Assembly	47 (13-19)	2	6680-01-121-0739
Low Fuel Sender Switch	47 (11)	2	5930-01-125-0788
Master Battery Switch	47 (1-4)	2	5930-01-120-7608
Searchlight Assembly	46 (1-6)	1	6230-01-126-9534
Inspection Light Assembly	46 (7-8)	1	6220-01-120-7468
Alternator Assembly	44 (18-60)	2	2920-01-122-3099
Battery Covers	43 (2)	4	6160-01-211-6911
Metallic Pipes Engine, Cooling, Exhaust, Water	31, 32, 33,35	ALL	BEB-PIPES
Fuel Lift Pump & Bracket	28 (1-6)	2	2910-01-123-0387
Fuel Filter & Bracket	27 (1-18)	1	2910-00-057-1421
Fuel Sedimenter	26 (1-19)	1	4930-01-123-0398
Gauge Rod, Fuel Indicating	23 (26, 30)	1	6680-01-163-0955
Circuit Breaker Box & Wiring (CB600)	21 (2-12)	1	5925-99-030-9078
Circuit Breaker Box & Wiring (CB1200)	21 (2-20)	1	BEB-CB1200
Diode Box (inside Gauge Panel)	21 (16-18)	1	BEB-JUMPER
Instrument Panel, Complete W/Wiring	20 (1-22)	1	6695-99-820-5205
Steering Link Assembly	18 (1-19)	1	2040-01-121-5733
Control Head Assembly (Throttle/Transmission	14 (1-35)	2	2990-01-150-3611
Control Head Assembly (Scoop)	13 (1-22)	1	2040-01-122-1033
Serviceable BII		ALL	BEB-BII

Government Furnished Property (GFP), CDR boat serial no. 0360.